中国认可
国际互认
检测
TESTING
CNAS L2264

RF TEST REPORT

Applicant	LUXROBO
FCC ID	2AL85-LUX-32
Product	Wifi/BT module
Brand	LUXROBO
Model	LUX-32
Report No.	RXA1704-0126RF01R1
Issue Date	July 14, 2017

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 15C (2016)**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Xianqing Li

Performed by: Xianqing Li

Kai Xu

Approved by: Kai Xu

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TABLE OF CONTENT

Summary of measurement results

Number	Summary of measurements of results	Clause in FCC rules	Verdict
1	Maximum Average conducted output power	15.247(b)(3)	PASS
2	6 dB bandwidth	15.247(a)(2)	PASS
3	Power spectral density	15.247(e)	PASS
4	Band Edge	15.247(d)	PASS
5	Spurious RF Conducted Emissions	15.247(d)	PASS
6	Radiated Emissions in restricted frequency bands	15.247(d),15.205,15.209	PASS
7	Radiated Emissions	15.247(d),15.205,15.209	PASS
8	Conducted Emissions	15.207	PASS
Date of Testing: May 2, 2017~ May 9, 2017			

1. Test Laboratory

1.1. Notes of the test report

This report shall not be reproduced in full or partial, without the written approval of **TA technology (shanghai) co., Ltd.** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein .Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of the applicable standards stated above. This report must not be used by the client to claim product certification, approval, or endorsement by CNAS or any government agencies.

1.2. Test facility

CNAS (accreditation number: L2264)

TA Technology (Shanghai) Co., Ltd. has obtained the accreditation of China National Accreditation Service for Conformity Assessment (CNAS).

FCC (recognition number is 428261)

TA Technology (Shanghai) Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

IC (recognition number is 8510A)

TA Technology (Shanghai) Co., Ltd. has been listed by industry Canada to perform electromagnetic emission measurement.

VCCI (recognition number is C-4595, T-2154, R-4113, G-766)

TA Technology (Shanghai) Co., Ltd. has been listed by industry Japan to perform electromagnetic emission measurement.

A2LA (Certificate Number: 3857.01)

TA Technology (Shanghai) Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform electromagnetic emission measurement.

1.3. Testing Location

Company:	TA Technology (Shanghai) Co., Ltd.
Address:	No.145, Jintang Rd, Tangzhen Industry Park, Pudong
City:	Shanghai
Post code:	201201
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E-mail:	xukai@ta-shanghai.com

2. General Description of Equipment under Test

Client Information

Applicant	LUXROBO
Applicant address	50, 63-ro, Yeoungdeungpo-gu, 63city 4th floor, Seoul, South Korea
Manufacturer	LUXROBO
Manufacturer address	50, 63-ro, Yeoungdeungpo-gu, 63city 4th floor, Seoul, South Korea

General information

EUT Description	
Model:	LUX-32
SN:	/
Hardware Version:	HW V1.0
Software Version:	SW V1.0
Antenna Type:	Embedded Antenna
Antenna Connector:	A permanently attached antenna (meet with the standard FCC Part 15.203 requirement)
Antenna Gain:	0.5 dBi
Test Mode:	Bluetooth(Low Energy) 802.11b 802.11g, 802.11n(HT20/HT40);
Modulation Type:	BLE :GFSK 802.11b: DSSS; 802.11g/n(HT20/HT40): OFDM
Max. Conducted Power	Wi-Fi 2.4G :16.78dBm BLE : -3.70 dBm
Operating Frequency Range(s)	802.11b/g/n(HT20): 2412 ~ 2462 MHz 802.11n(HT40): 2422 ~ 2452 MHz BLE: 2402 ~2480 MHz
Note: The information of the EUT is declared by the manufacturer. Please refer to the specifications or user manual for details.	

3. Applied Standards

According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

Test standards

- **FCC CFR47 Part 15C (2016) Radio Frequency Devices**
- **ANSI C63.10 (2013)**
- **KDB 558074 D01 DTS Meas Guidance v04**

4. Test Configuration

Test Mode

The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98%.

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

The radiated emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in stand-up position (Z axis) and the worst case was recorded.

In order to find the worst case condition, Pre-tests are needed at the presence of different data rate. Preliminary tests have been done on all the configuration for confirming worst case. Data rate below means worst-case rate of each test item.

Worst-case data rates are shown as following table.

Band	**Data Rate**
Bluetooth(Low Energy)	1Mbps
802.11b	1 Mbps
802.11g	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0

5. Test Case Results

5.1. Average Power Output –Conducted

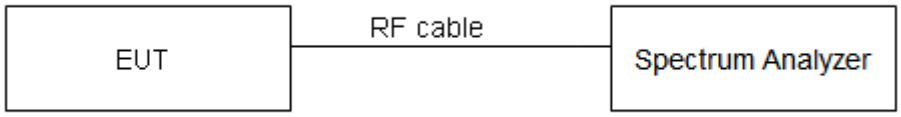
Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Methods of Measurement

During the process of the testing, The EUT was connected to Spectrum Analyzer with a known loss. The EUT is max power transmission with proper modulation. The Average detector is used. We use Maximum Average Conducted Output Power Level Method in KDB 558074 D01 for this test.

Test Setup



Limits

Rule Part 15.247 (b) (3) specifies that " For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz: 1 Watt."

Average Output Power	≤ 1W (30dBm)

Measurement Uncertainty

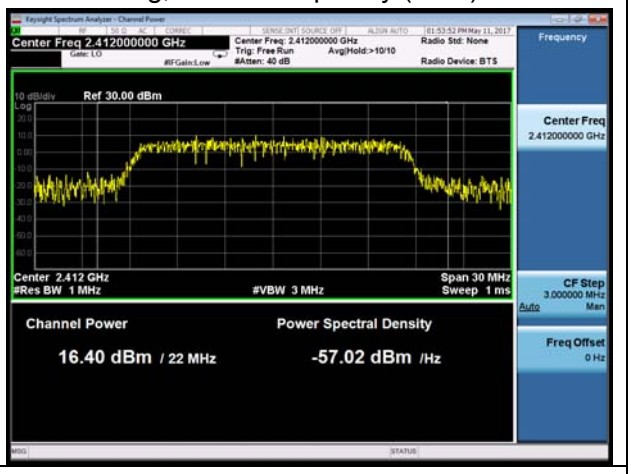
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 2, U= 0.44 dB.

Test Results

Network Standards	Carrier frequency (MHz)	Average Output Power (dBm)	Limit (dBm)	Conclusion
802.11b	2412	16.78	30	PASS
	2437	16.44	30	PASS
	2462	15.90	30	PASS
802.11g	2412	16.40	30	PASS
	2437	15.91	30	PASS
	2462	15.74	30	PASS
802.11n HT20	2412	16.26	30	PASS
	2437	16.11	30	PASS
	2462	15.94	30	PASS
802.11n HT40	2422	16.35	30	PASS
	2437	16.08	30	PASS
	2452	16.13	30	PASS
Bluetooth (Low Energy)	2402	-5.65	30	PASS
	2440	-4.87	30	PASS
	2480	-3.70	30	PASS

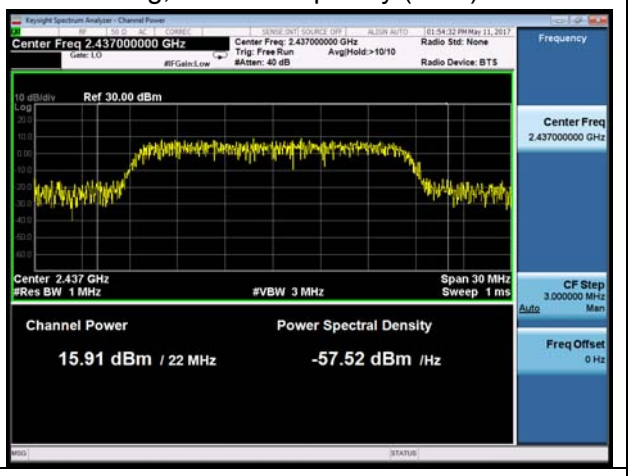
802.11b, Carrier frequency (MHz): 2412

802.11g, Carrier frequency (MHz): 2412

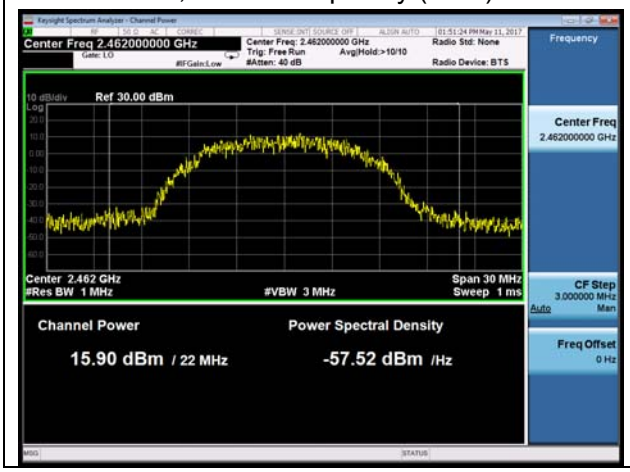


802.11b, Carrier frequency (MHz): 2437

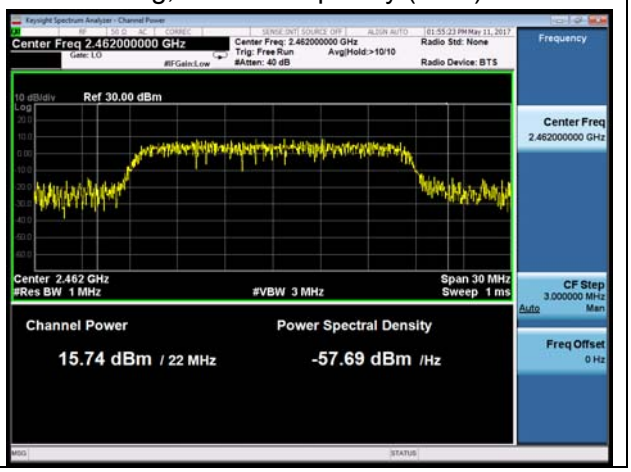
802.11g, Carrier frequency (MHz): 2437



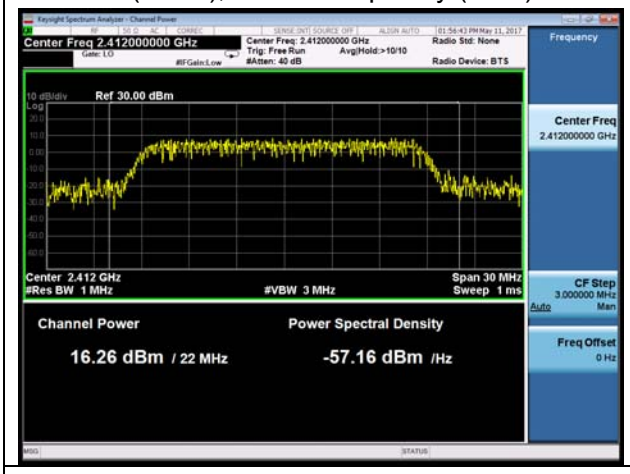
802.11b, Carrier frequency (MHz):2462



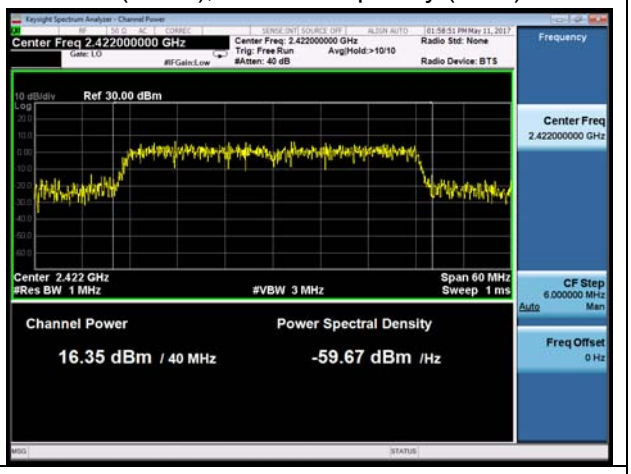
802.11g, Carrier frequency (MHz):2462



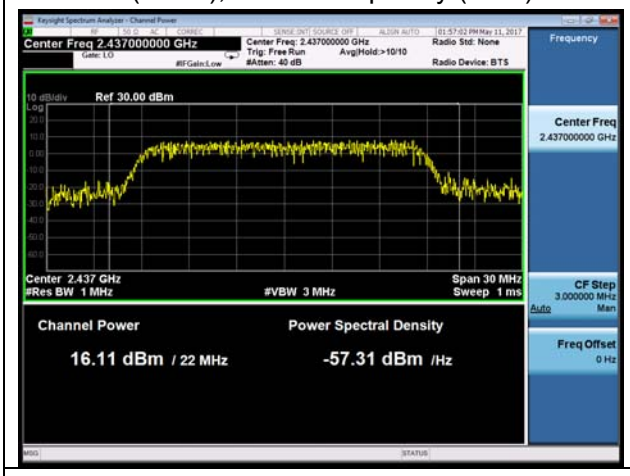
802.11n(HT20), Carrier frequency (MHz): 2412



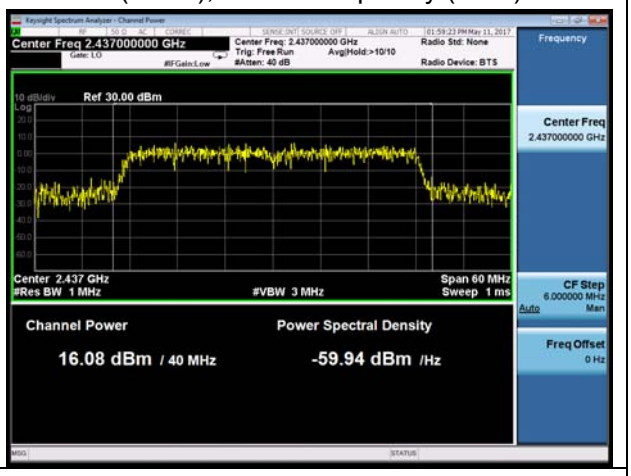
802.11n(HT40), Carrier frequency (MHz): 2422



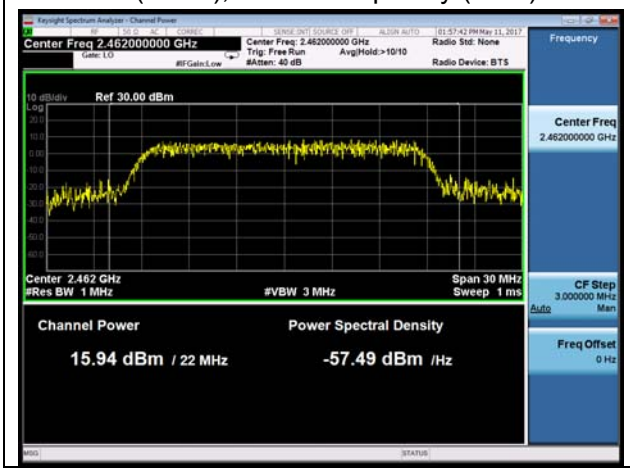
802.11n(HT20), Carrier frequency (MHz): 2437



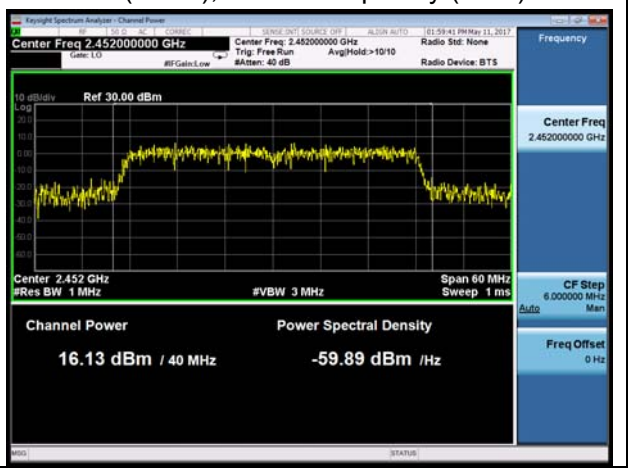
802.11n(HT40), Carrier frequency (MHz): 2437



802.11n(HT20), Carrier frequency (MHz):2462



802.11n(HT40), Carrier frequency (MHz):2452



BLE Carrier frequency (MHz): 2402

BLE Carrier frequency (MHz): 2440

BLE Carrier frequency (MHz): 2480

5.2. 6dB Bandwidth

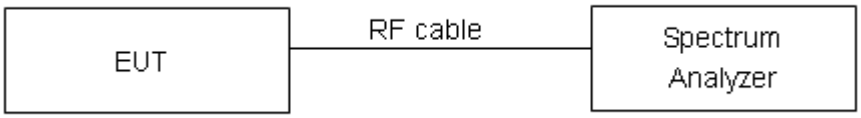
Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable. RBW is set to 100 kHz; VBW is set to 300 kHz on spectrum analyzer.

Test Setup



Limits

Rule Part 15.247 (a) (2) specifies that “Systems using digital modulation techniques may operate in the 902–928 MHz, 2400–2483.5 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.”

minimum 6 dB bandwidth	≥ 500 kHz

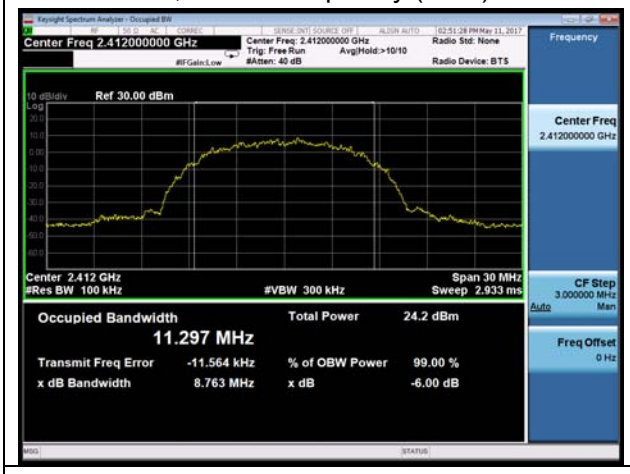
Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 2, U= 936 Hz.

Test Results:

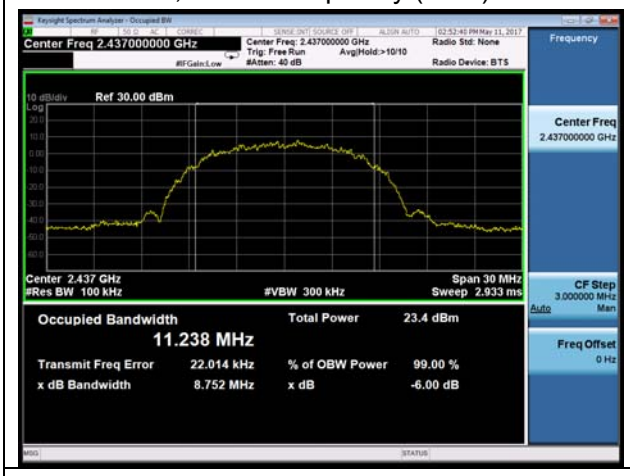
Network Standards	Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 6 dB bandwidth (MHz)	Limit (kHz)	Conclusion
802.11b	2412	11.297	8.763	500	PASS
	2437	11.238	8.752	500	PASS
	2462	11.235	8.761	500	PASS
802.11g	2412	16.471	15.96	500	PASS
	2437	16.418	15.94	500	PASS
	2462	16.408	16.26	500	PASS
802.11n HT20	2412	17.404	16.33	500	PASS
	2437	17.392	16.32	500	PASS
	2462	17.450	16.32	500	PASS
802.11n HT40	2422	36.445	35.57	500	PASS
	2437	36.305	35.57	500	PASS
	2452	36.222	35.23	500	PASS
Bluetooth (Low Energy)	2402	1.0251	0.6499	500	PASS
	2440	1.0248	0.6469	500	PASS
	2480	1.0263	0.6489	500	PASS

802.11b, Carrier frequency (MHz): 2412



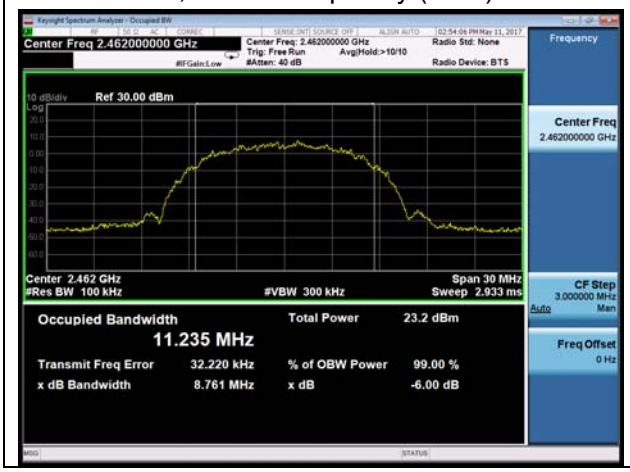
802.11g, Carrier frequency (MHz): 2412

802.11b, Carrier frequency (MHz): 2437



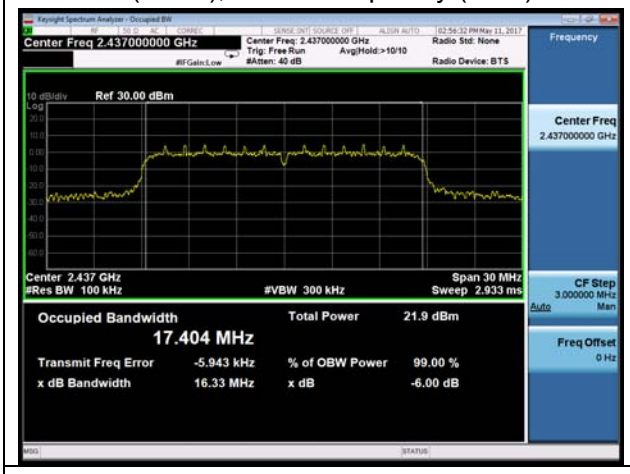
802.11g, Carrier frequency (MHz): 2437

802.11b, Carrier frequency (MHz):2462



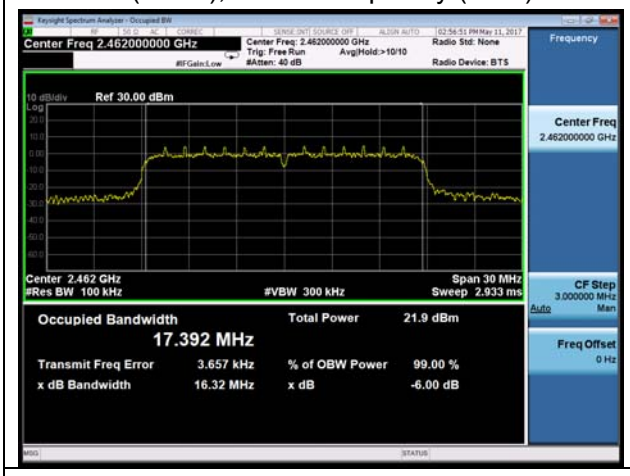
802.11g, Carrier frequency (MHz):2462

802.11n(HT20), Carrier frequency (MHz): 2412



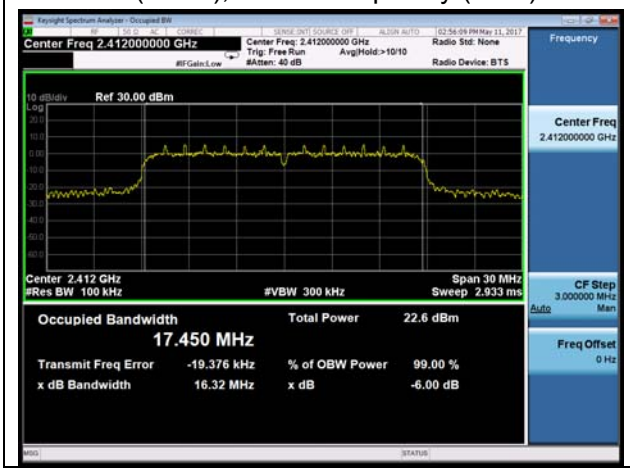
802.11n(HT40), Carrier frequency (MHz): 2422

802.11n(HT20), Carrier frequency (MHz): 2437

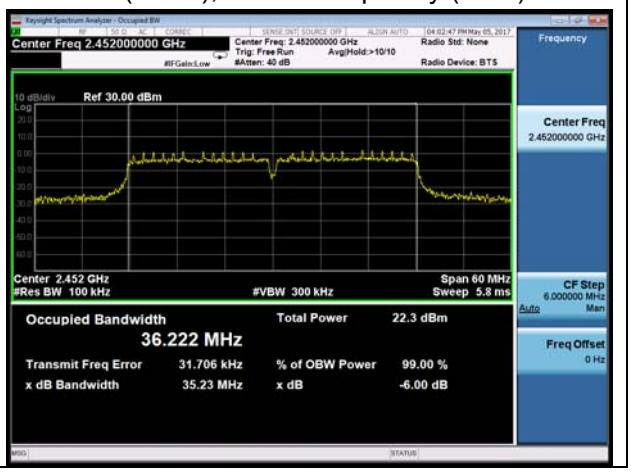


802.11n(HT40), Carrier frequency (MHz): 2437

802.11n(HT20), Carrier frequency (MHz):2462



802.11n(HT40), Carrier frequency (MHz):2452



BLE Carrier frequency (MHz): 2402

BLE Carrier frequency (MHz): 2440

BLE Carrier frequency (MHz): 2480

5.3. Band Edge

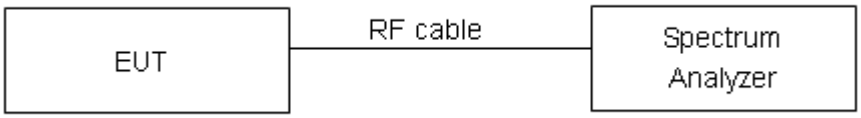
Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable the band edge of the lowest and highest channels were measured. The peak detector is used and RBW is set to 100 kHz and VBW is set to 300 kHz on spectrum analyzer. Spectrum analyzer plots are included on the following pages.

Test Setup



Limits

Rule Part 15.247(d) specifies that “In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.”

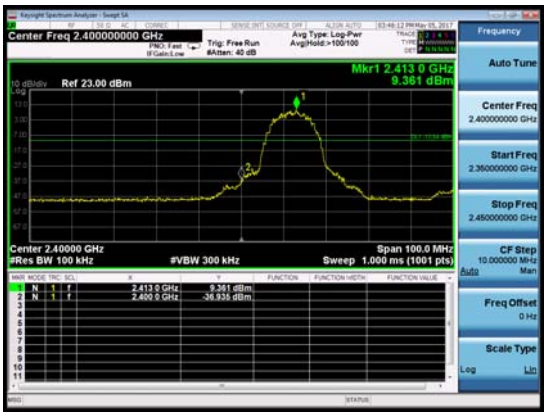
Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 1.96.

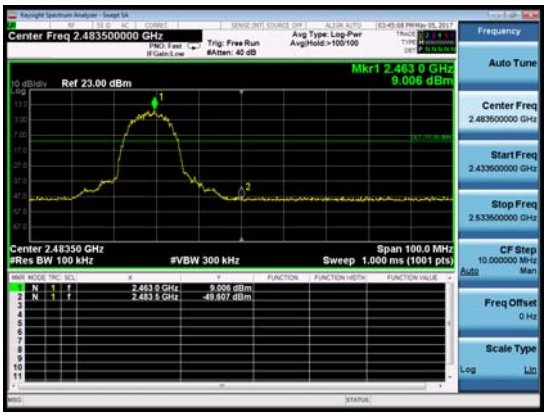
Frequency	Uncertainty
2GHz-3GHz	1.407 dB

Test Results: PASS

802.11b, Channel No.: 1



802.11b, Channel No.: 11



802.11g, Channel No.: 1

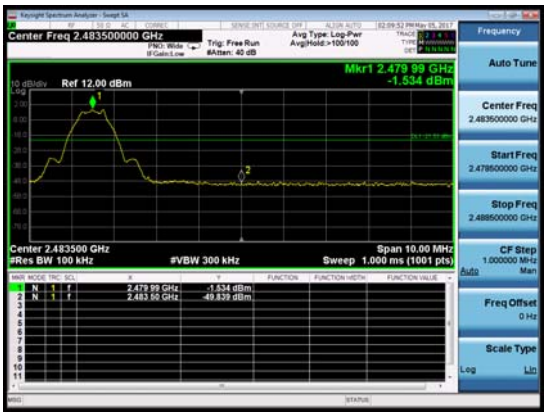
802.11g, Channel No.: 11

802.11n (HT20), Channel No.: 1

802.11n (HT20), Channel No.: 11

802.11n (HT40), Channel No.: 3

802.11n (HT40), Channel No.: 9

BLE, Channel No.: 0	BLE, Channel No.: 39
	

5.4. Power Spectral Density

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

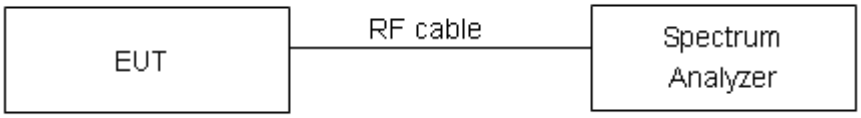
Method of Measurement

The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable.

RBW is set to 3 kHz and VBW is set to 10 kHz for BLE/ Wi-Fi 2.4G on spectrum analyzer.

Set the span to 1.5 times the DTS channel bandwidth. Sweep time = auto couple. Trace mode = max hold. The Average power spectral density is recorded.

Test setup



Limits

Rule Part 15.247(e) specifies that" For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. ''

Limits	≤ 8 dBm / 3kHz

Measurement Uncertainty

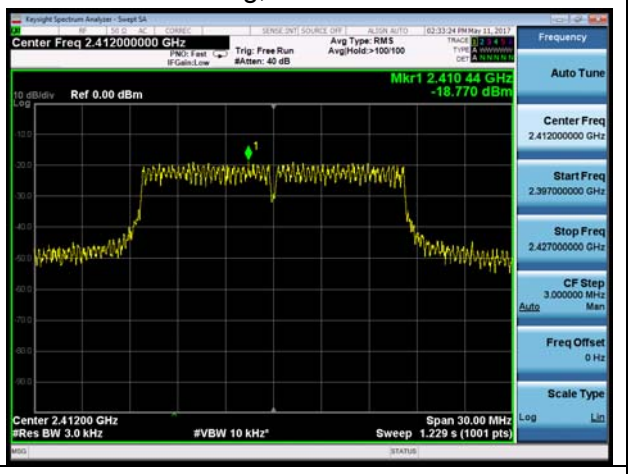
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 2, U= 0.75dB.

Test Results:

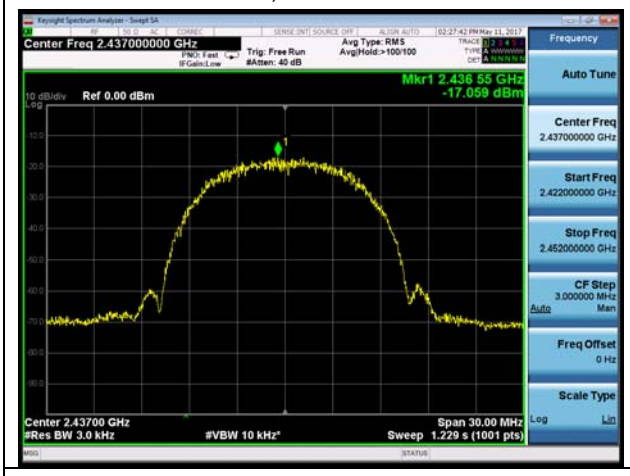
Network Standards	Channel Number	Power Spectral Density (dBm / 3kHz)	Limit (dBm / 3kHz)	Conclusion
802.11b	1	-16.357	8	PASS
	6	-17.059	8	PASS
	11	-16.935	8	PASS
802.11g	1	-18.770	8	PASS
	6	-19.471	8	PASS
	11	-19.401	8	PASS
802.11n HT20	1	-19.170	8	PASS
	6	-19.544	8	PASS
	11	-19.514	8	PASS
802.11n HT40	3	-22.273	8	PASS
	6	-22.356	8	PASS
	9	-22.051	8	PASS
Bluetooth (Low Energy)	0	-23.980	8	PASS
	19	-23.750	8	PASS
	39	-22.418	8	PASS

802.11b, Channel No.: 1

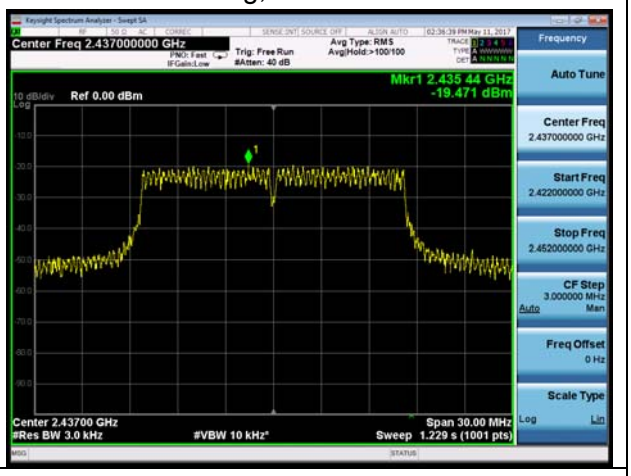
802.11g, Channel No.: 1



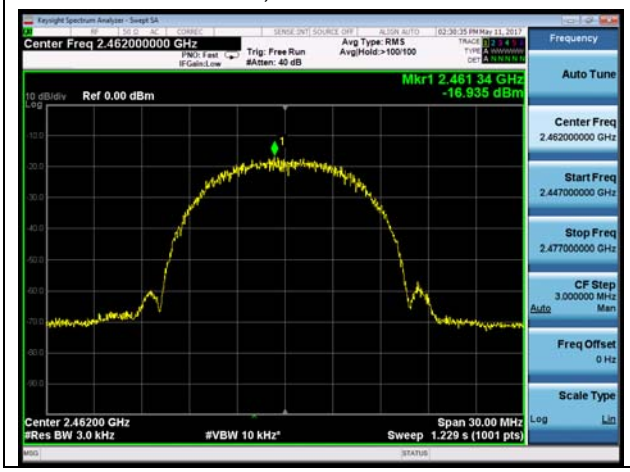
802.11b, Channel No.: 6



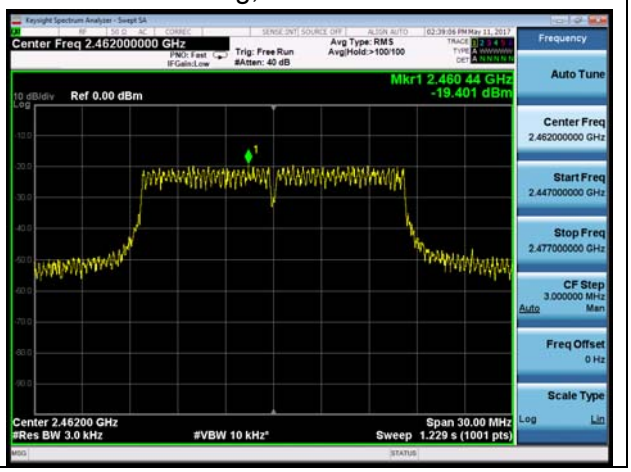
802.11g, Channel No.: 6



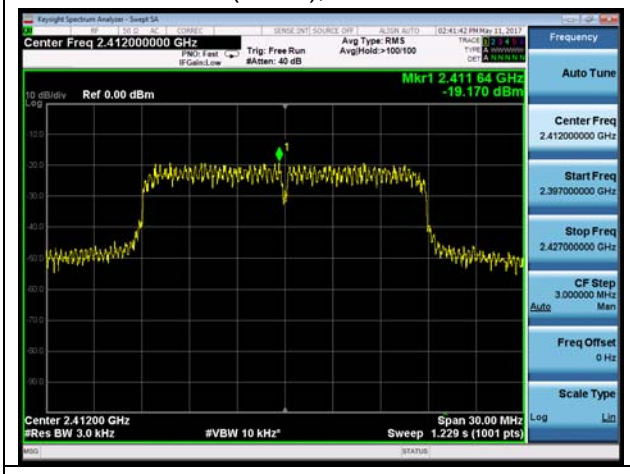
802.11b, Channel No.: 11



802.11g, Channel No.: 11

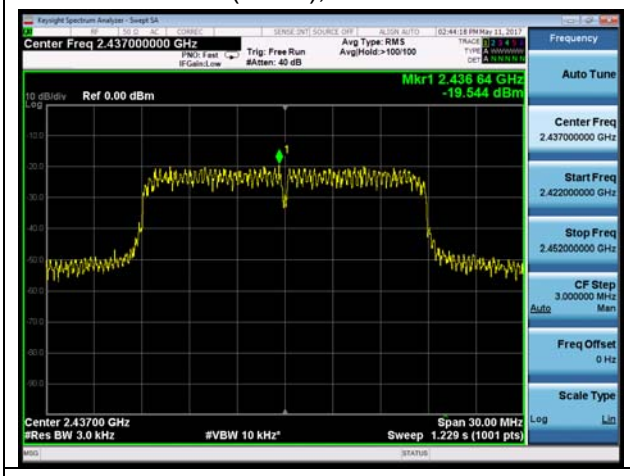


802.11n(HT20), Channel No. 1



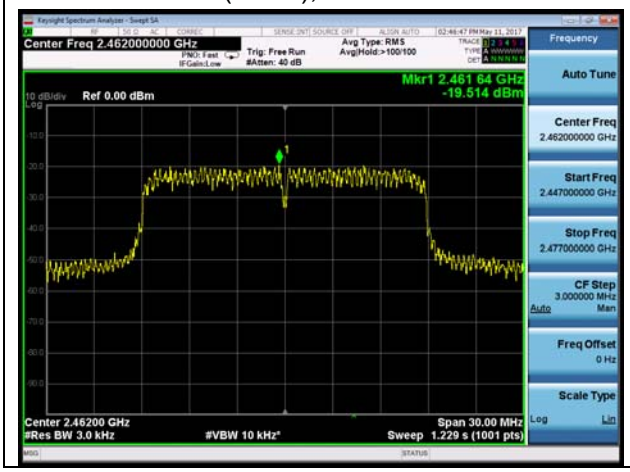
802.11n(HT40), Channel No. 3

802.11n(HT20), Channel No. 6



802.11n(HT40), Channel No. 6

802.11n(HT20), Channel No. 11

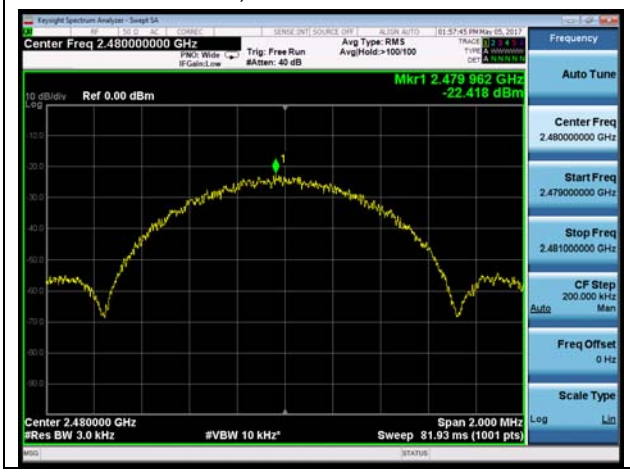


802.11n(HT40), Channel No. 9

BLE, Channel No.: 0

BLE, Channel No.: 19

BLE, Channel No.: 39



5.5. Spurious RF Conducted Emissions

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

The EUT was connected to the spectrum analyzer with a known loss. The spectrum analyzer scans from 30MHz to the 10th harmonic of the carrier. The peak detector is used. RBW and VBW are set to 100 kHz, Sweep is set to ATUO.
The test is in transmitting mode.

Test setup

Limits

Rule Part 15.247(d) pacifies that “In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.”

Network Standards	Carrier frequency (MHz)	Reference value (dBm)	Limit
802.11b	2412	7.45	-12.55
	2437	6.53	-13.47
	2462	6.35	-13.65
802.11g	2412	0.49	-19.51
	2437	-0.69	-20.69
	2462	-1.04	-21.04
802.11n HT20	2412	0.97	-19.03
	2437	-0.52	-20.52
	2462	-0.39	-20.39
802.11n HT40	2422	-2.71	-22.71
	2437	-3.61	-23.61
	2452	-3.85	-23.85
Bluetooth (Low Energy)	2402	8.41	-11.59
	2440	8.56	-11.44
	2480	9.28	-10.72

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor *k* = 1.96.

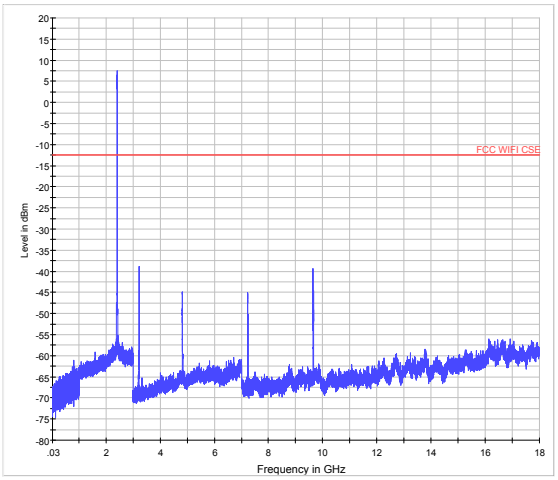
Frequency	Uncertainty
100kHz-2GHz	0.684 dB
2GHz-26GHz	1.407 dB

Test Results:

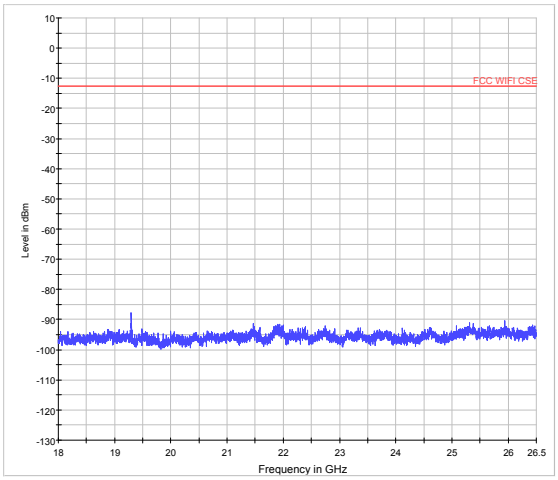
If disturbances were found more than 20dB below limit line, the mark is not required for the EUT.

The signal beyond the limit is carrier.

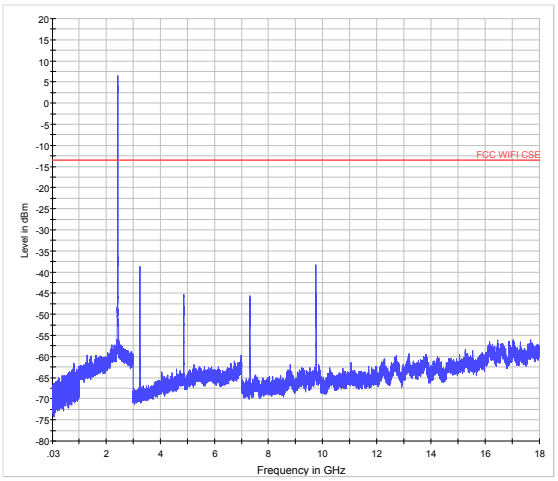
Test Data File Name	Frequency (MHz)	Peak (dBm)	Limit (dBm)	Margin (dB)
WIFI g CH01_0.03-18GHz	3216.0	-39.06	-19.51	19.55
WIFI g CH06_0.03-18GHz	3249.0	-38.89	-20.69	18.20
WIFI g CH11_0.03-18GHz	3282.0	-40.62	-21.04	19.57
WIFI n(20M) CH06_0.03-18GHz	3249.0	-38.93	-20.52	18.42
WIFI n(20M) CH11_0.03-18GHz	7384.5	-40.07	-20.39	19.67
WIFI n(40M) CH03_0.03-18GHz	3228.8	-39.13	-22.71	16.42
WIFI n(40M) CH06_0.03-18GHz	3249.0	-39.01	-23.61	15.39
WIFI n(40M) CH09_0.03-18GHz	3269.3	-39.86	-23.85	16.02



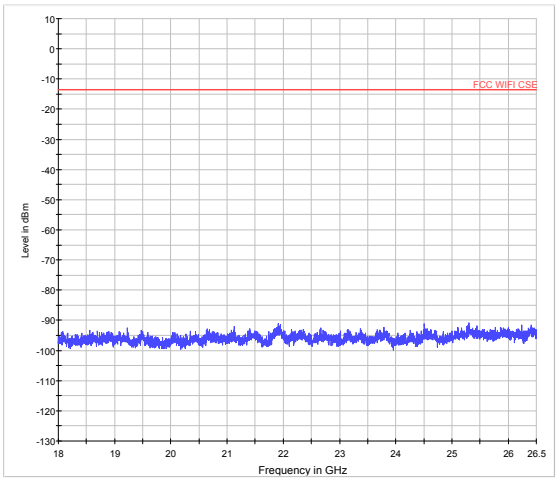
802.11b CH1 30MHz to 18GHz



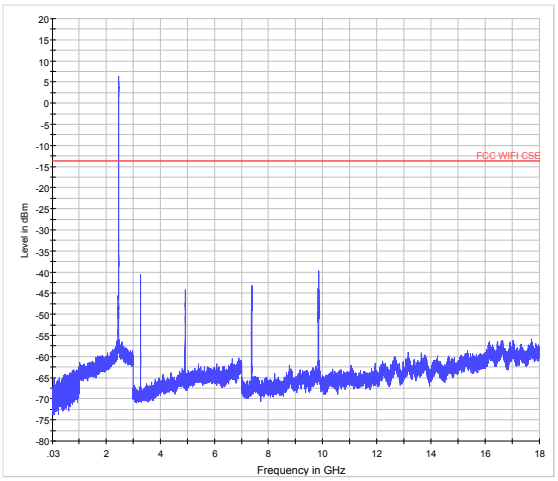
802.11b CH1 18GHz to 26.5GHz



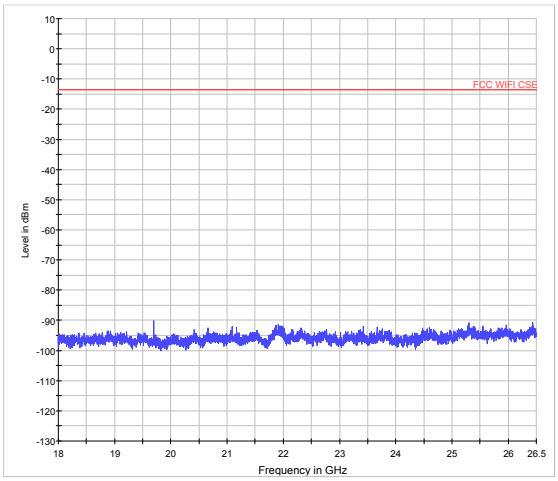
802.11b CH6 30MHz to 18GHz



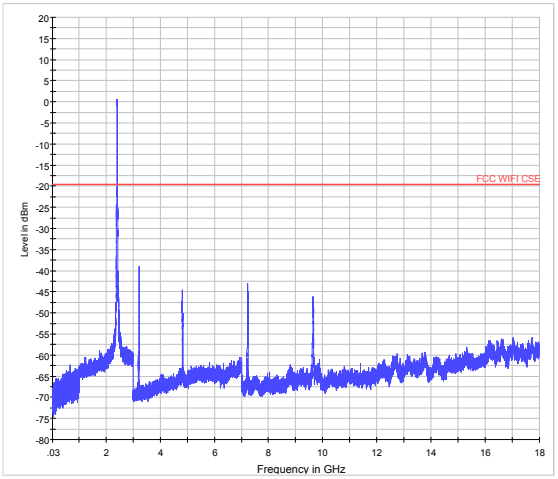
802.11b CH6 18GHz to 26.5GHz



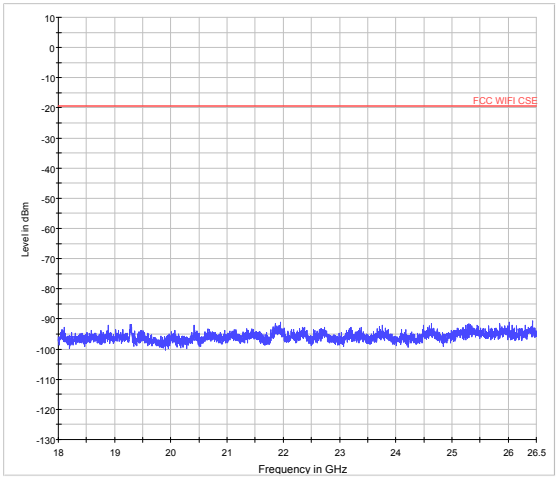
802.11b CH11 30MHz to 18GHz



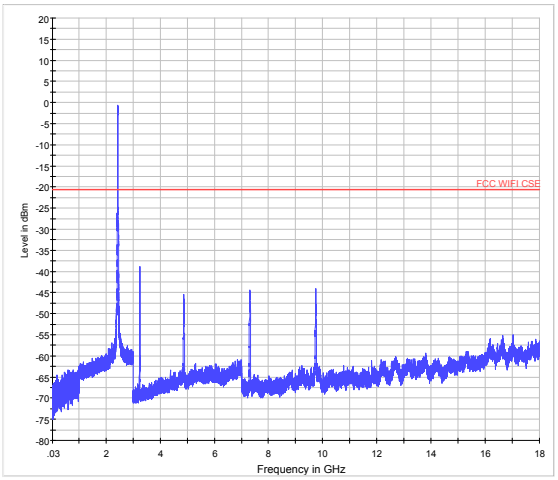
802.11b CH11 18GHz to 26.5GHz



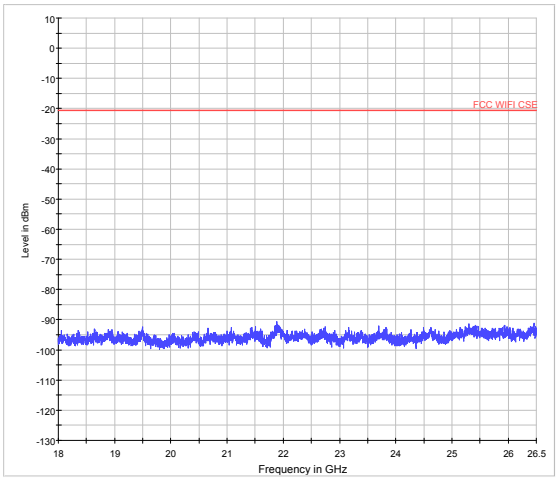
802.11g CH1 30MHz to 18GHz



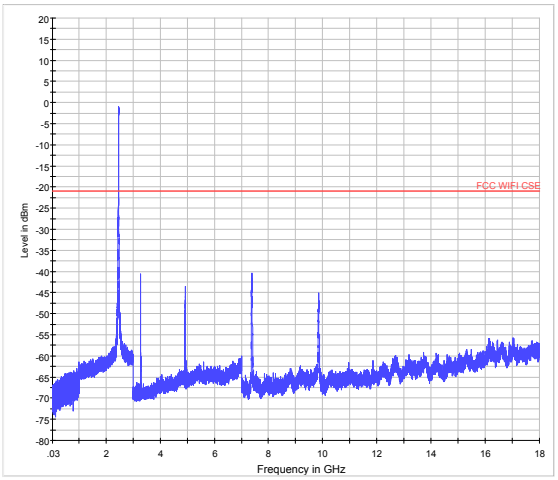
802.11g CH1 18GHz to 26.5GHz



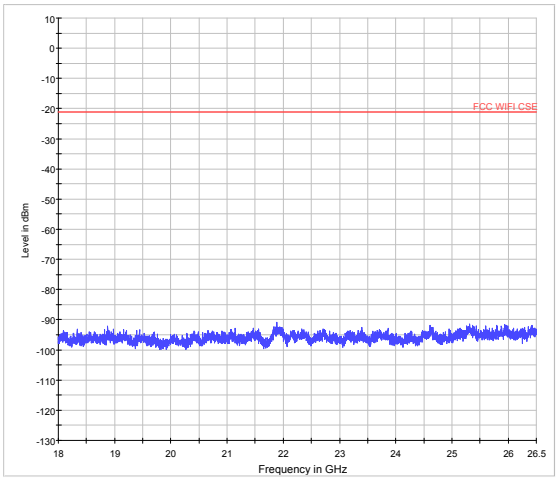
802.11g CH6 30MHz to 18GHz



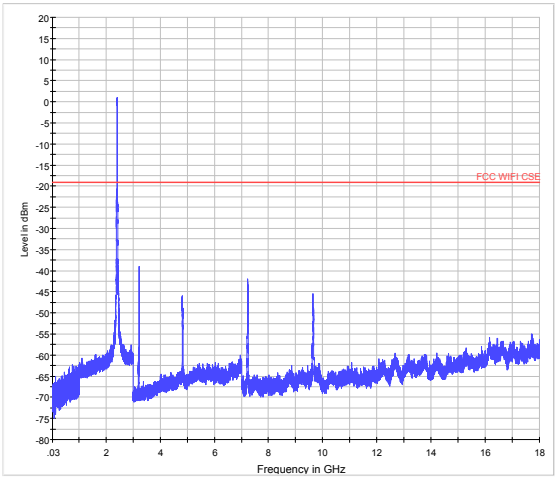
802.11g CH6 18GHz to 26.5GHz



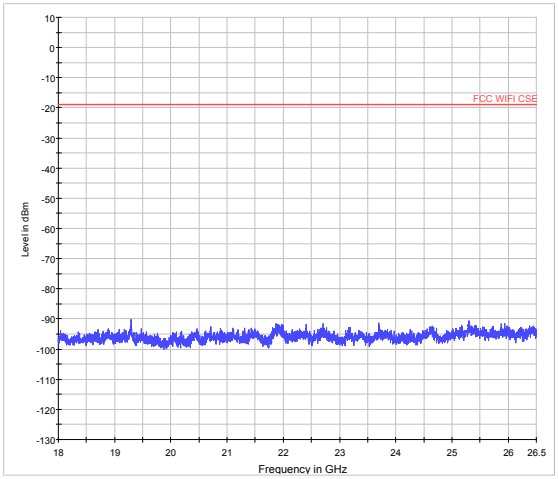
802.11g CH11 30MHz to 18GHz



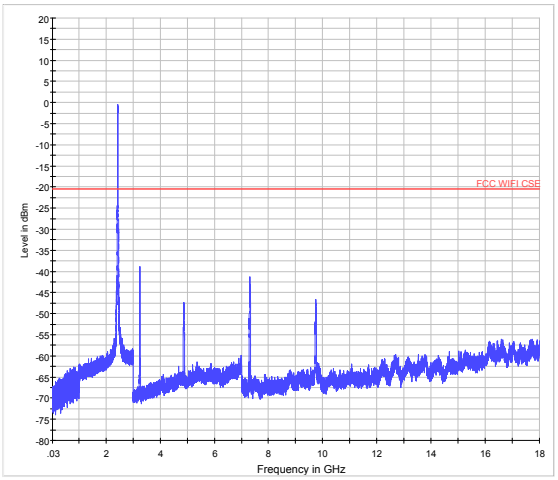
802.11g CH11 18GHz to 26.5GHz



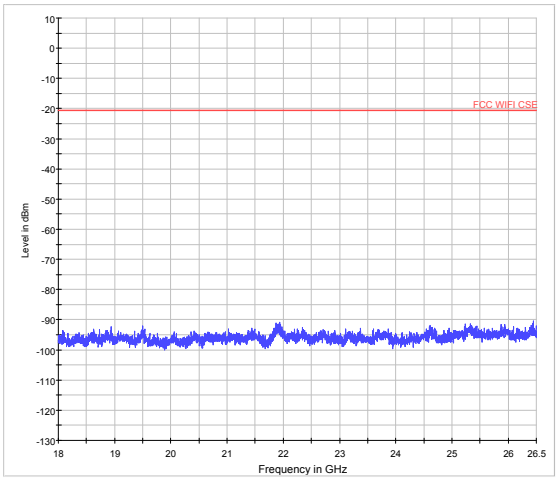
802.11n (HT20) CH1 30MHz to 18GHz



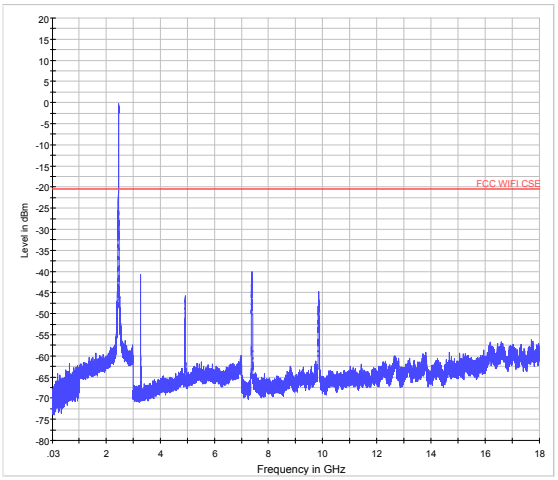
802.11n (HT20) CH1 18GHz to 26.5GHz



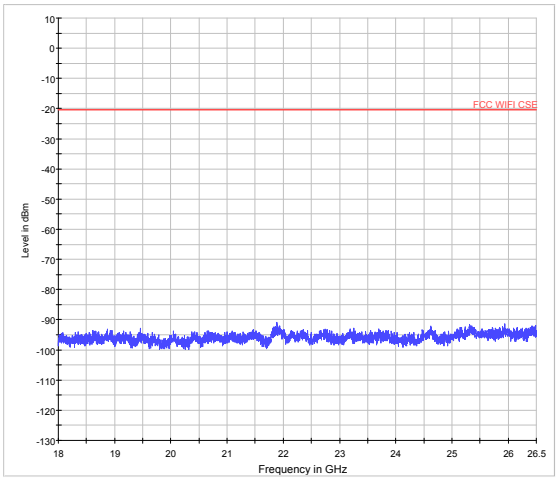
802.11n (HT20) CH6 30MHz to 18GHz



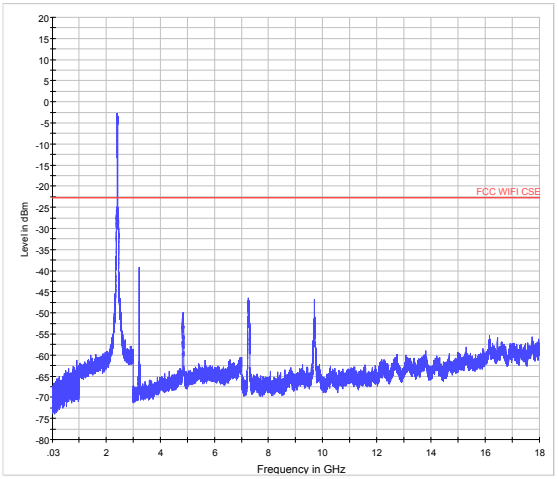
802.11n (HT20) CH6 18GHz to 26.5GHz



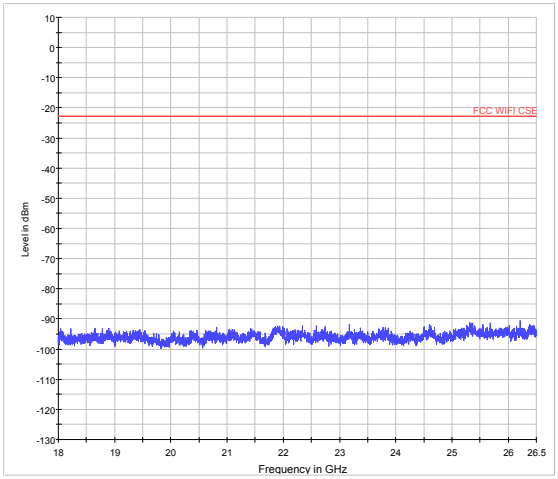
802.11n (HT20) CH11 30MHz to 18GHz



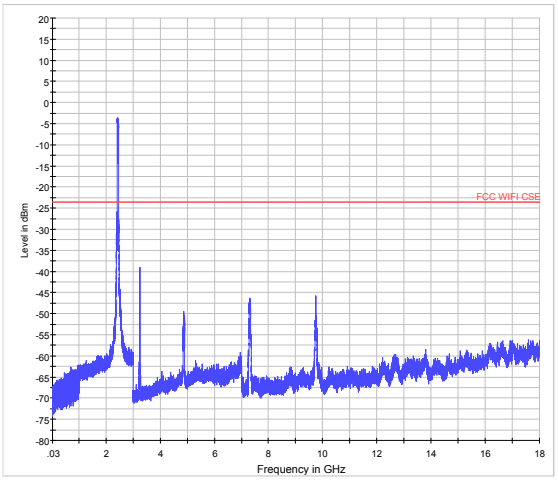
802.11n (HT20) CH11 18GHz to 26.5GHz



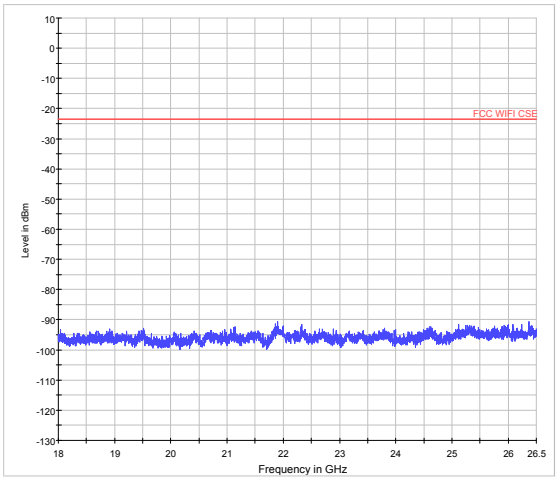
802.11n (HT40) CH3 30MHz to 18GHz



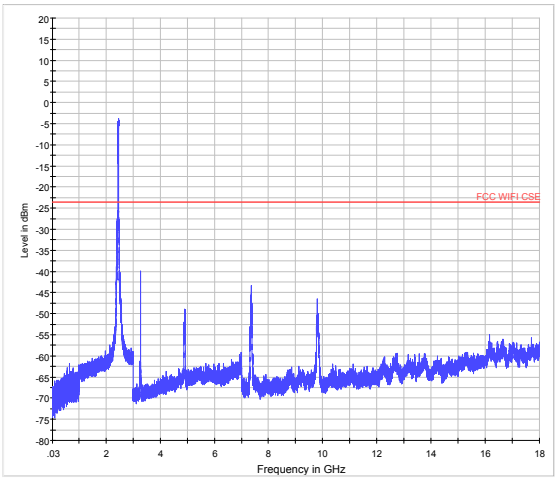
802.11n (HT40) CH3 18GHz to 26.5GHz



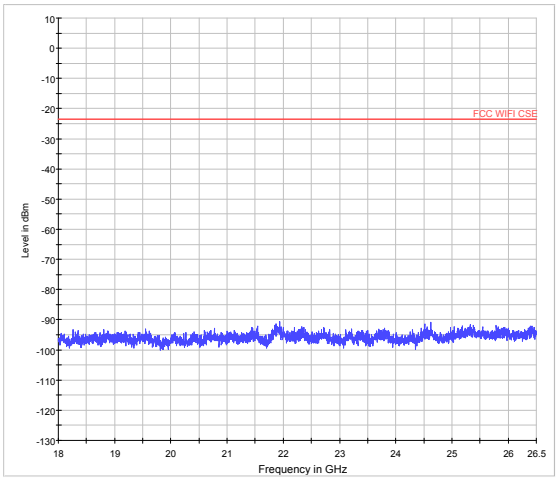
802.11n (HT40) CH6 30MHz to 18GHz



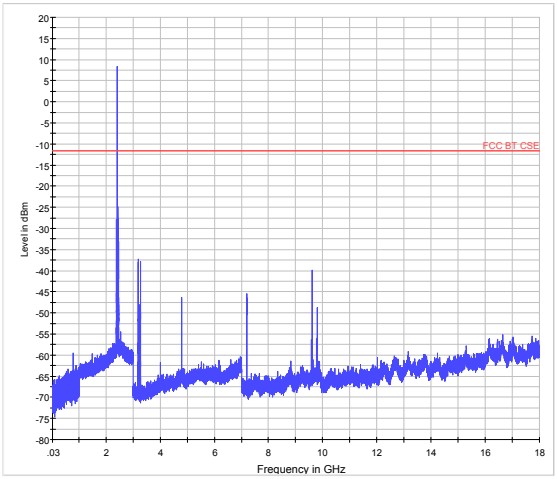
802.11n (HT40) CH6 18GHz to 26.5GHz



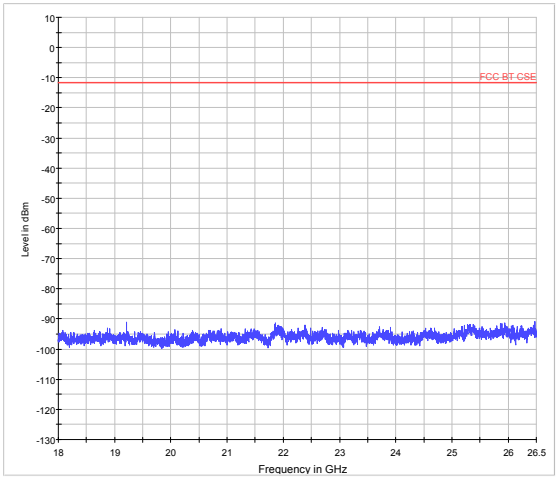
802.11n (HT40) CH9 30MHz to 18GHz



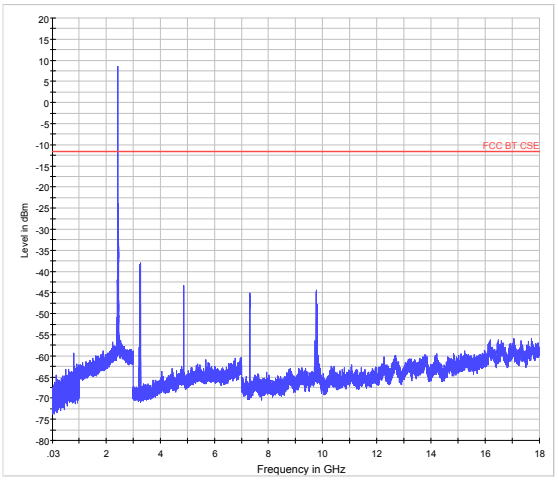
802.11n (HT40) CH9 18GHz to 26.5GHz



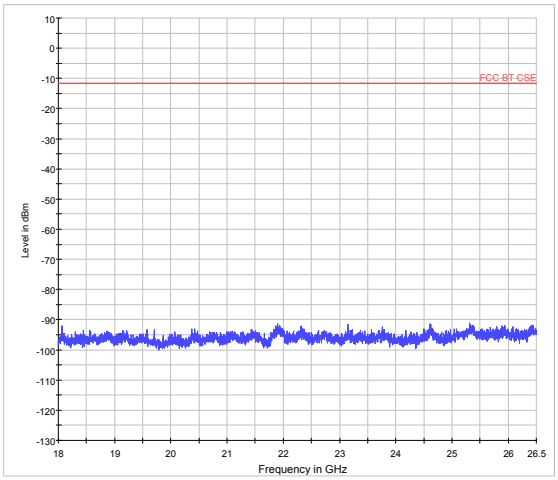
BLE CH0 30MHz to 18GHz



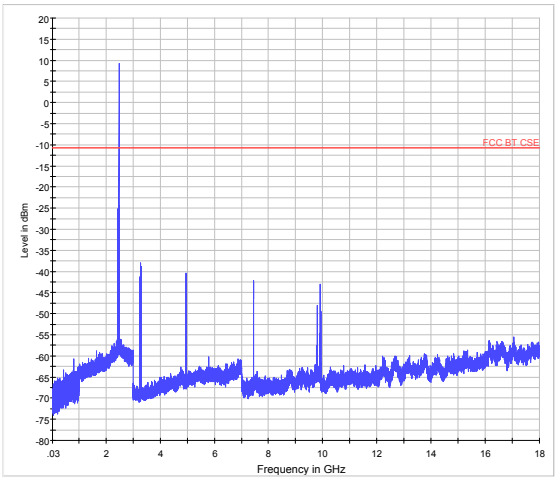
BLE CH0 18GHz to 26.5GHz



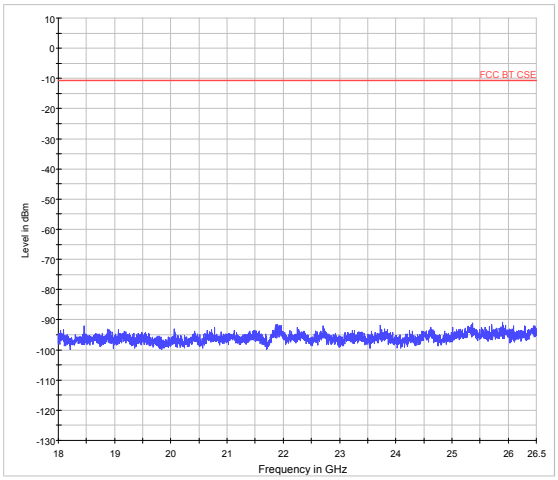
BLE CH19 30MHz to 18GHz



BLE CH19 18GHz to 26.5GHz



BLE CH39 30MHz to 18GHz



BLE CH39 18GHz to 18GHz

5.6. Radiated Emissions in the Restricted Band

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

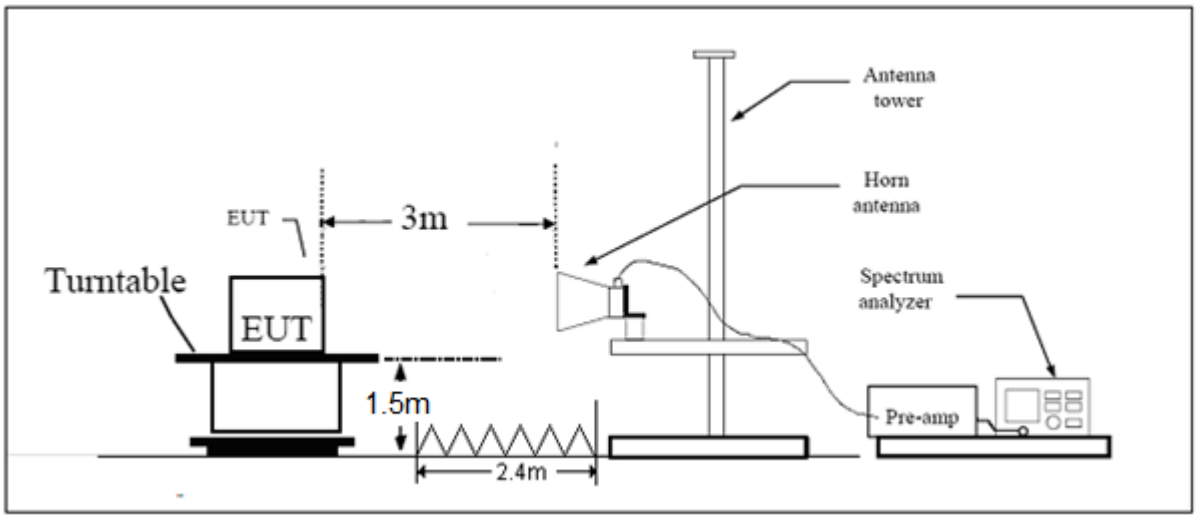
The Equipment Under Test (EUT) was set up on a non-conductive table in the semi-anechoic chamber. The test was performed at the distance of 3 m between the EUT and the receiving antenna. The turntable shall be rotated from 0 to 360 degrees for detecting the maximum of radiated spurious signal level. The measurements shall be repeated with orthogonal polarization of the test antenna. RBW is set to 100kHz.The data of cable loss and antenna factor has been calibrated in full testing frequency range before the testing. Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier, and the emissions less than 20 dB below the permissible value are reported.

Set the spectrum analyzer in the following:
(a) PEAK: RBW=VBW=1MHz / Sweep=AUTO
(b) AVERAGE: RBW=1MHz / VBW=1MHz / Sweep=AUTO
This setting method can refer to **KDB 558074.**

The field strength of spurious emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in stand-up position (Y axis) and the antenna is vertical.

The test is in transmitting mode.

Test setup



Note: Area side: 2.4mX3.6m

Limits

Spurious Radiated Emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
[1]0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	([2])
13.36 - 13.41			

Limit in restricted band

Frequency of emission (MHz)	Field strength(uV/m)	Field strength(dBuV/m)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above960	500	54

§15.35(b)

There is also a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit.

Peak Limit=74 dBuV/m

Average Limit=54 dBuV/m

Measurement Uncertainty

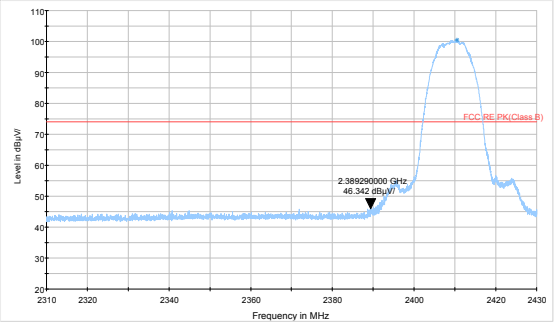
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 1.96, U= 3.55 dB.

Test Results:

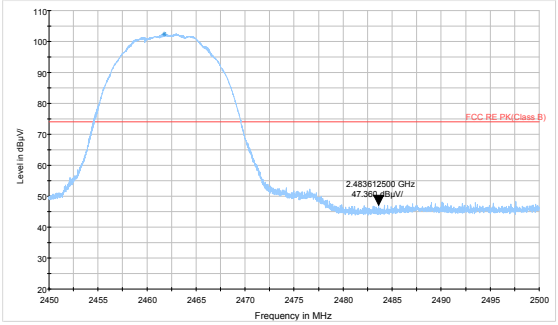
PASS

The signal beyond the limit is carrier.

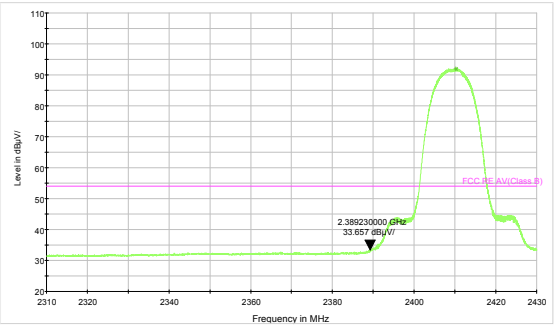
802.11b-Channel 1: Peak



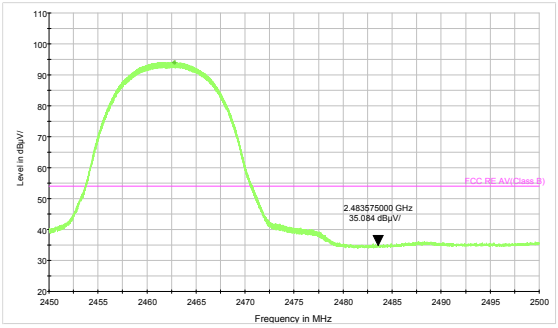
802.11b-Channel 11: Peak



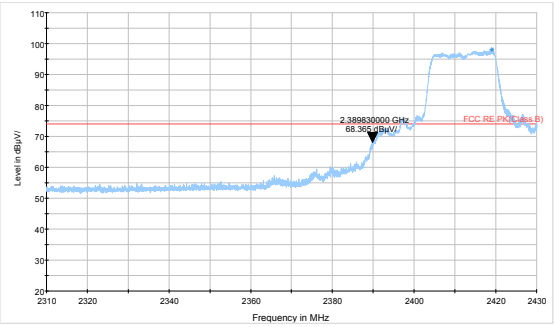
802.11b-Channel 1: Average



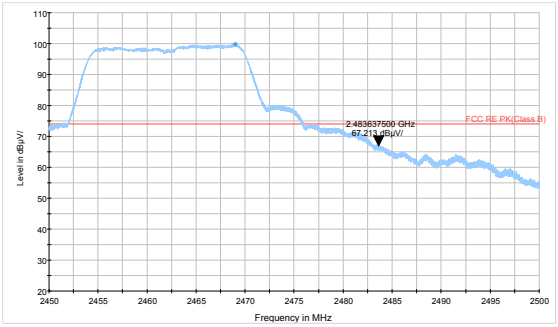
802.11b-Channel 11: Average



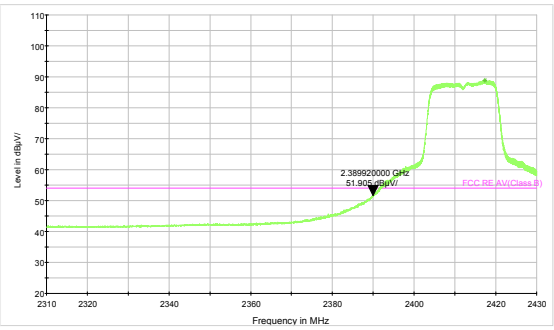
802.11g-Channel 1: Peak



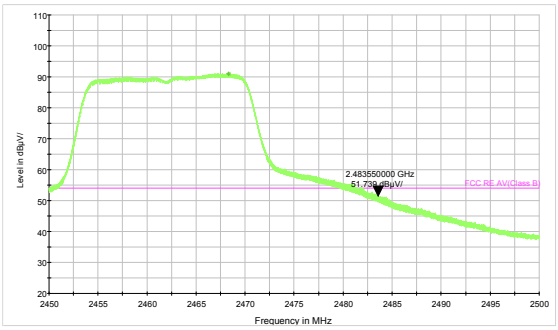
802.11g-Channel 11: Peak



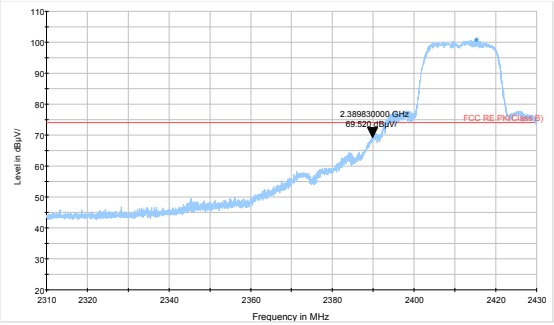
802.11g-Channel 1: Average



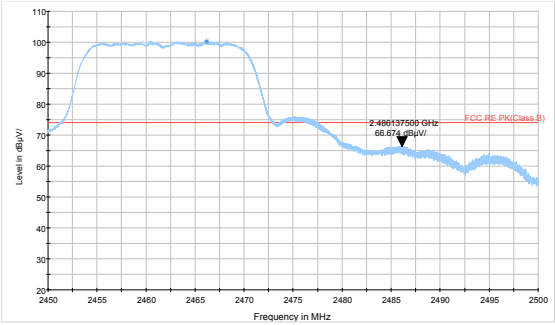
802.11g-Channel 11: Average



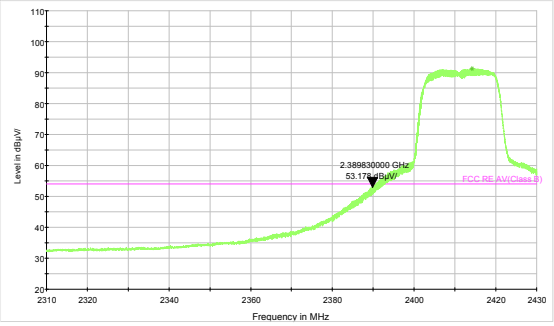
802.11n HT20 -Channel 1: Peak



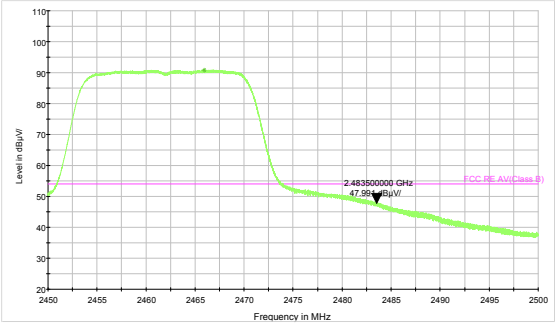
802.11n HT20-Channel 11: Peak



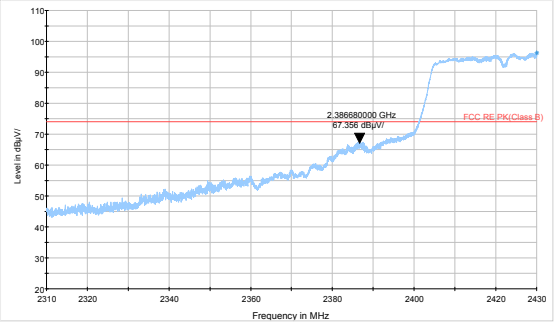
802.11n HT20-Channel 1: Average



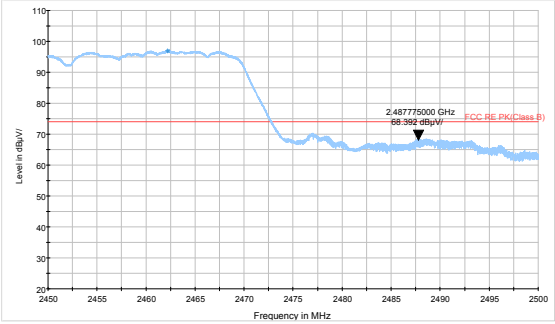
802.11n HT20-Channel 11: Average



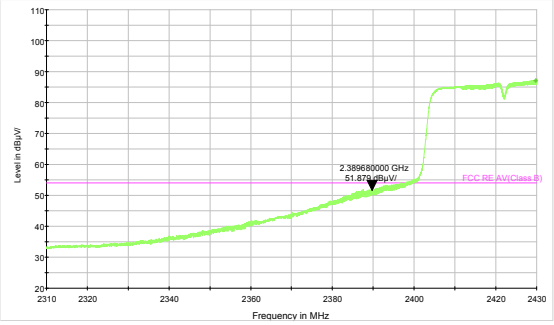
802.11n HT40 -Channel 3: Peak



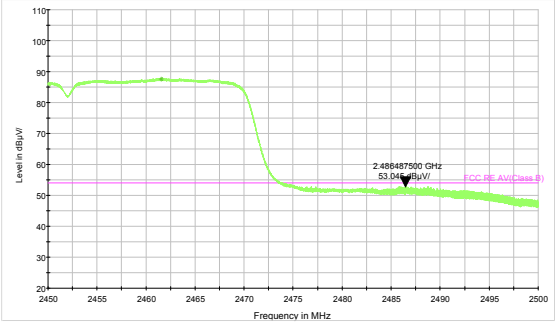
802.11n HT40-Channel 9: Peak



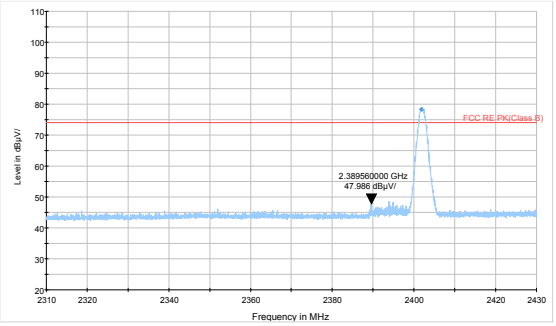
802.11n HT40-Channel 3: Average



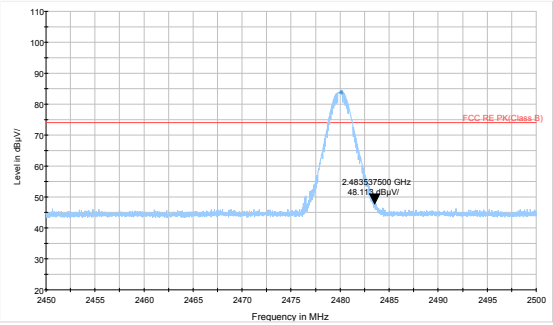
802.11n HT40-Channel 9: Average



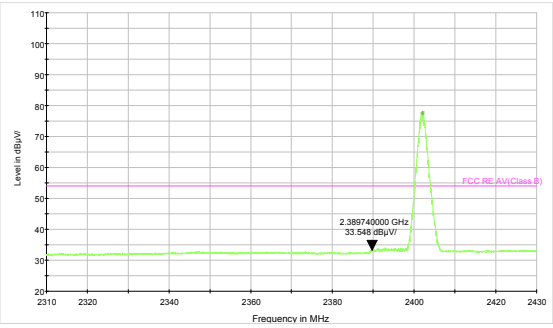
BLE -Channel 0: Peak



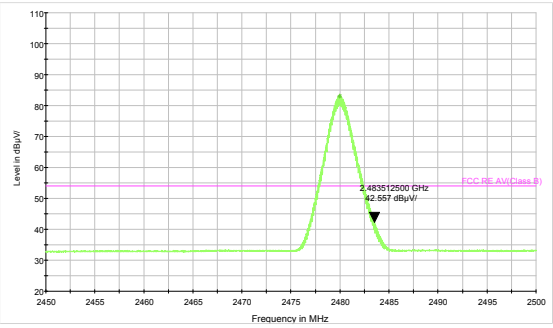
BLE -Channel 39: Peak



BLE -Channel 0: Average



BLE -Channel 39: Average



5.7. Radiates Emission

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	102.5kPa

Method of Measurement

The test set-up was made in accordance to the general provisions of ANSI C63.10-2013.The Equipment Under Test (EUT) was set up on a non-conductive table in the semi-anechoic chamber. The test was performed at the distance of 3 m between the EUT and the receiving antenna. The radiated emissions measurements were made in a typical installation configuration.
Sweep the whole frequency band through the range from 9 kHz to the 10th harmonic of the carrier, and the emissions less than 20 dB below the permissible value are reported.

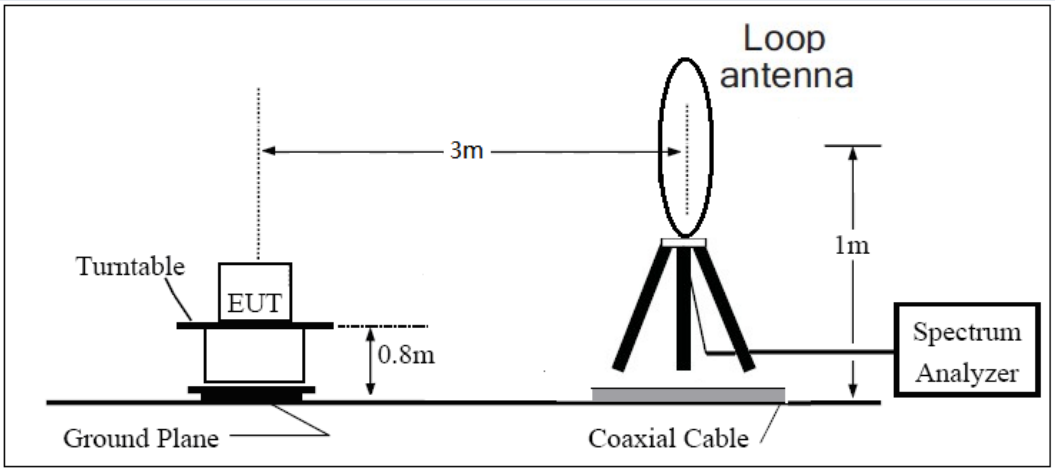
During the test, below 30MHz, the center of the loop shall be 1 meters; above 30MHz, the height of receive antenna shall be moved from 1 to 4 meters, and the antenna shall be performed under horizontal and vertical polarization. The turntable shall be rotated from 0 to 360 degrees for detecting the maximum of radiated spurious signal level. The measurements shall be repeated with orthogonal polarization of the test antenna. The data of cable loss and antenna factor has been calibrated in full testing frequency range before the testing.
Set the spectrum analyzer in the following:
Below 1GHz (detector: Peak and Quasi-Peak)
RBW=100 kHz / VBW=300 kHz / Sweep=AUTO
Above 1GHz (detector: Peak):
(a) PEAK: RBW=1MHz VBW=3MHz/ Sweep=AUTO
(b) AVERAGE: RBW=1MHz / VBW=3MHz / Sweep=AUTO

The radiated emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in stand-up position (Z axis) and the worst case was recorded.

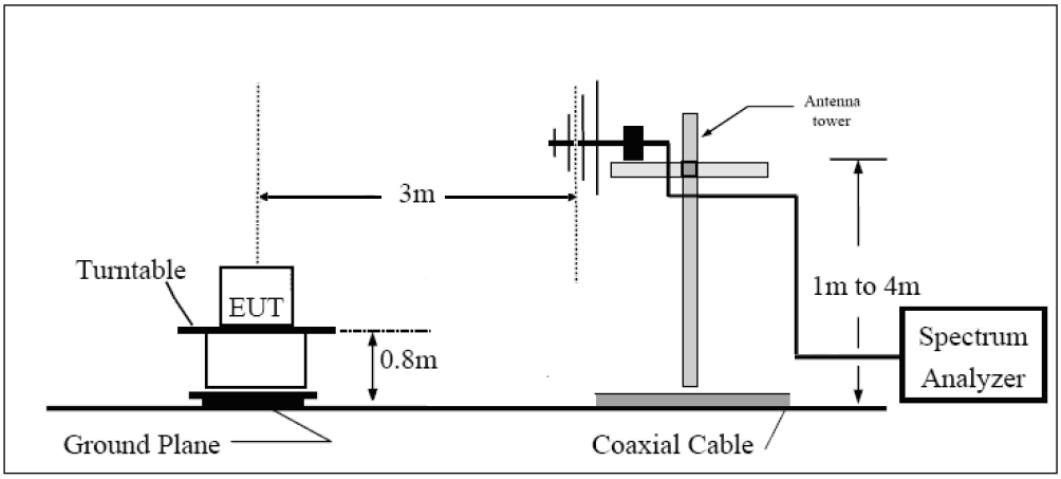
The test is in transmitting mode.

Test setup

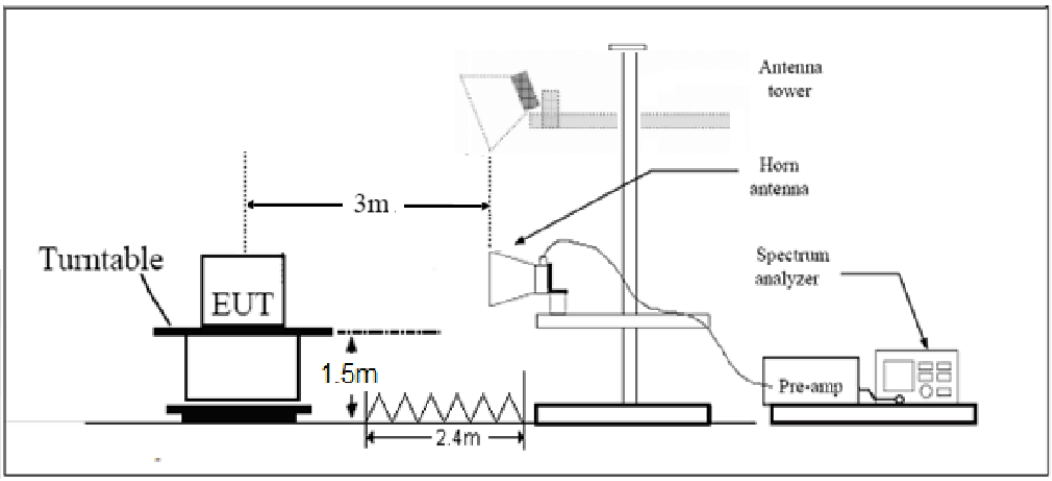
9KHz ~ 30MHz



30MHz ~ 1GHz



Above 1GHz



Note: Area side:2.4mX3.6m

Limits

Rule Part 15.247(d) specifies that “In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).”

Limit in restricted band

Frequency of emission (MHz)	Field strength(uV/m)	Field strength(dBuV/m)
0.009–0.490	2400/F(kHz)	/
0.490–1.705	24000/F(kHz)	/
1.705–30.0	30	/
30-88	100	40
88-216	150	43.5
216-960	200	46
Above960	500	54

§15.35(b)

There is also a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit.

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 1.96.

Frequency	Uncertainty
9KHz-30MHz	3.55 dB
30MHz-200MHz	4.19 dB
200MHz-1GHz	3.63 dB
Above 1GHz	3.68 dB

Test result

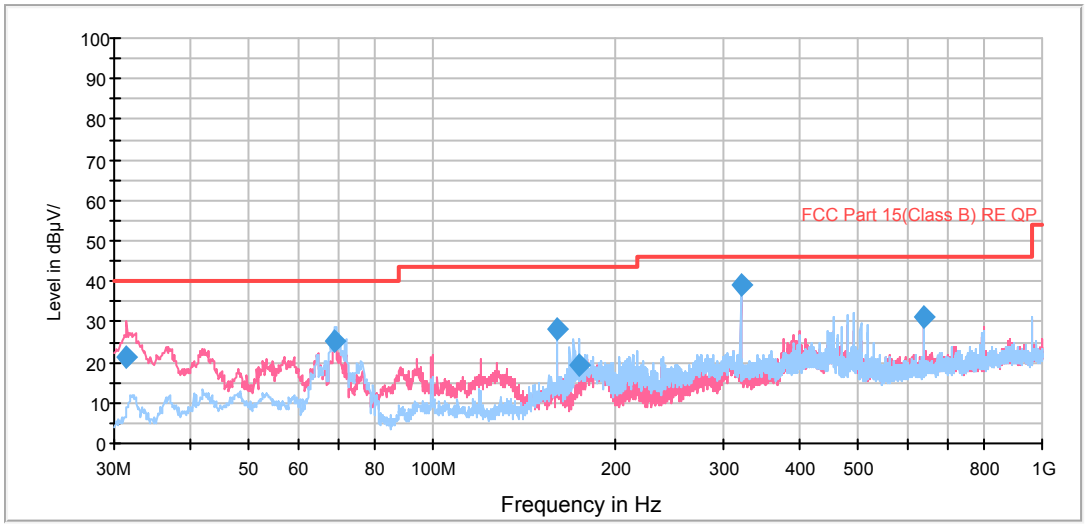
Sweep from 9 kHz to 30MHz, and the emissions more than 20 dB below the permissible value are not reported.

The following graphs display the maximum values of horizontal and vertical by software.

For above 1GHz, Blue trace uses the peak detection, Green trace uses the average detection.

802.11b CH1

RE 30M-1GHz QP



Radiates Emission from 30MHz to 1GHz

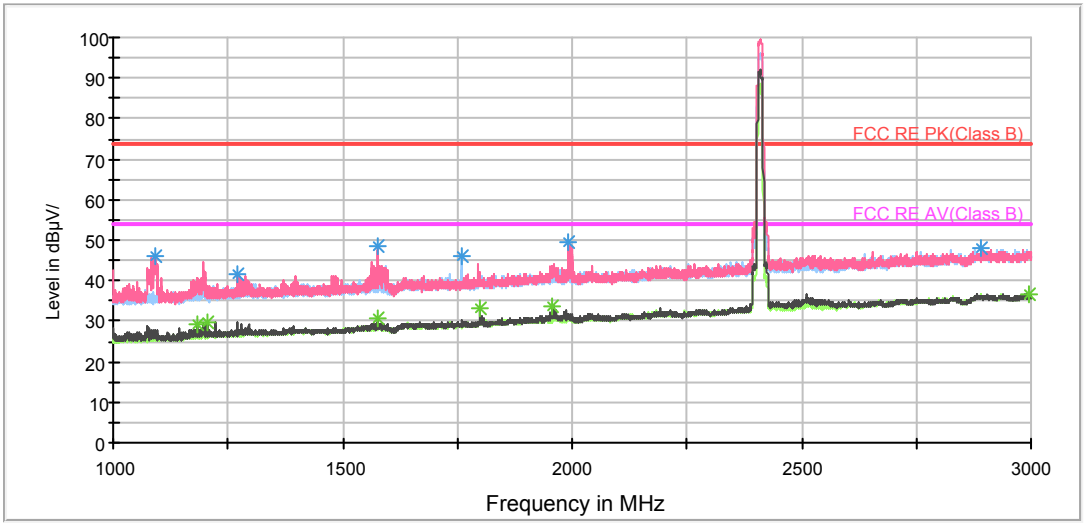
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
31.456362	21.2	101.0	V	86.0	43.7	-22.5	18.8	40.0
69.109894	25.3	102.0	H	7.0	51.5	-26.2	14.7	40.0
159.980050	28.0	126.0	H	38.0	56.7	-28.7	15.5	43.5
174.491781	19.2	126.0	H	79.0	47.9	-28.7	24.3	43.5
319.990000	38.9	99.0	H	272.0	62.2	-23.3	7.1	46.0
640.008750	31.3	101.0	V	273.0	47.7	-16.4	14.7	46.0

Remark: 1. Quasi-Peak = Reading value + Correction factor

2. Correction Factor = Antenna factor+ Insertion loss (cable loss+amplifier gain)

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

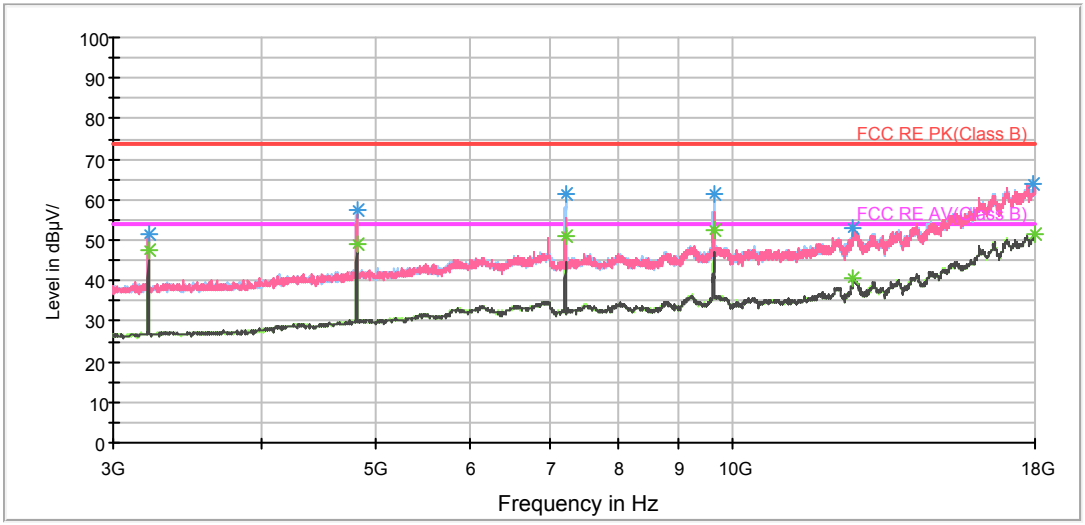
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1090.750000	45.8	101.0	V	263.0	54.7	-8.9	28.2	74
1272.000000	41.7	101.0	V	168.0	49.4	-7.7	32.3	74
1577.750000	48.4	101.0	V	102.0	54.7	-6.3	25.6	74
1759.500000	46.0	101.0	H	167.0	50.8	-4.8	28.0	74
1992.500000	49.5	101.0	V	0.0	52.8	-3.3	24.5	74
2889.000000	47.9	101.0	H	0.0	45.7	2.2	26.1	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1182.750000	29.1	101.0	V	177.0	37.1	-8.0	24.9	54
1204.750000	29.8	101.0	V	132.0	38.0	-8.2	24.2	54
1577.500000	30.7	101.0	V	102.0	37.0	-6.3	23.3	54
1800.750000	33.0	101.0	V	213.0	36.9	-3.9	21.0	54
1958.250000	33.6	101.0	V	0.0	36.9	-3.3	20.4	54
2995.750000	36.7	101.0	V	79.0	34.4	2.3	17.3	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3211.875000	51.6	200.0	H	157.0	54.4	-2.8	22.4	74
4816.875000	57.3	100.0	H	348.0	56.0	1.3	16.7	74
7228.125000	61.4	200.0	H	138.0	54.8	6.6	12.6	74
9637.500000	61.3	200.0	H	138.0	51.4	9.9	12.7	74
12643.125000	52.7	200.0	V	0.0	38.3	14.4	21.3	74
17921.250000	63.7	200.0	H	0.0	38.0	25.7	10.3	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3211.875000	47.3	200.0	H	157.0	50.1	-2.8	6.7	54
4818.750000	49.0	200.0	H	325.0	47.7	1.3	5.0	54
7228.125000	51.1	200.0	H	138.0	44.5	6.6	2.9	54
9637.500000	52.3	200.0	H	138.0	42.4	9.9	1.7	54
12639.375000	40.6	400.0	H	0.0	26.1	14.5	13.4	54
18000.000000	51.4	400.0	H	65.0	25.9	25.5	2.6	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18037.187500	47.2	H	262.0	49.2	-2.0	26.8	74
20008.125000	46.9	V	0.0	52.6	-5.7	27.1	74
20783.750000	46.5	V	46.0	53.4	-6.9	27.5	74
22652.687500	46.6	H	345.0	53.2	-6.6	27.4	74
24662.937500	45.3	H	0.0	51.3	-6.0	28.7	74
25794.500000	45.7	H	324.0	51.2	-5.5	28.3	74

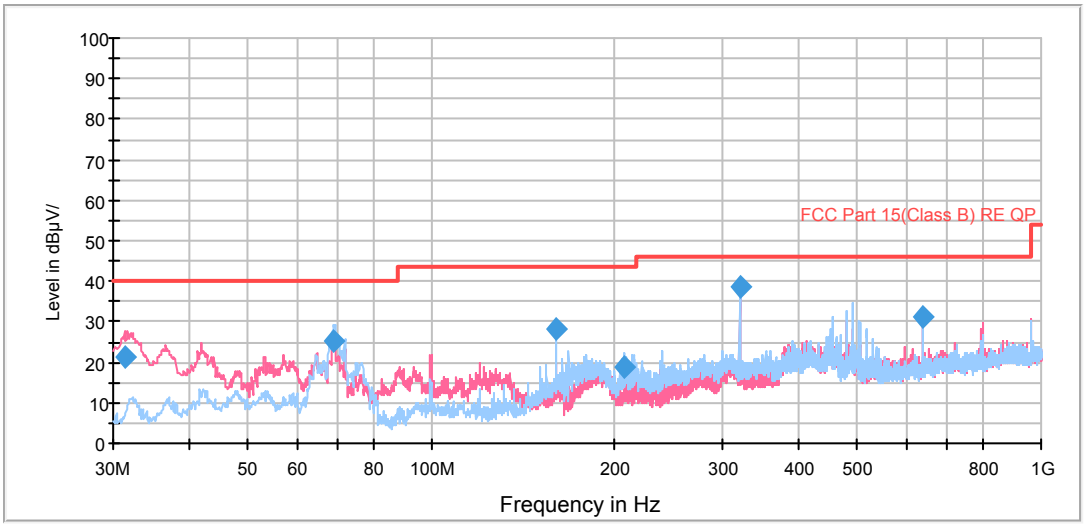
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18002.125000	35.8	V	228.0	37.6	-1.8	18.2	54
20403.375000	34.0	H	0.0	40.1	-6.1	20.0	54
20654.125000	34.7	H	0.0	41.3	-6.6	19.3	54
23151.000000	34.7	H	0.0	40.8	-6.1	19.3	54
23396.437500	33.6	H	134.0	39.5	-5.9	20.4	54
25804.062500	34.0	V	0.0	39.5	-5.5	20.0	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11b CH6

RE 30M-1GHz QP



Radiates Emission from 30MHz to 1GHz

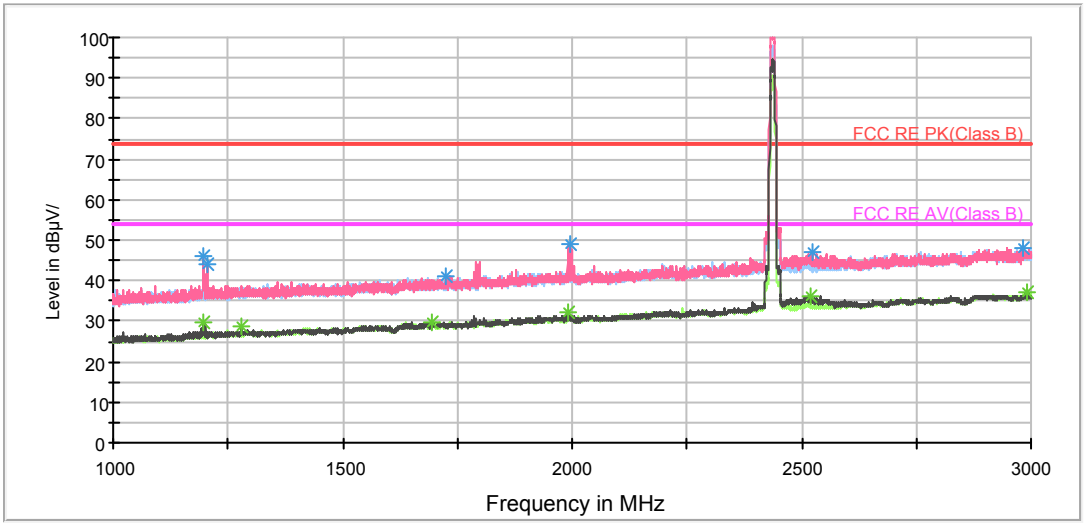
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
31.412085	21.4	101.0	V	0.0	43.9	-22.5	18.6	40.0
69.111788	25.2	101.0	H	0.0	51.4	-26.2	14.8	40.0
159.980050	28.2	126.0	H	33.0	56.9	-28.7	15.3	43.5
207.551000	18.8	126.0	H	71.0	44.9	-26.1	24.7	43.5
319.990000	38.4	101.0	H	272.0	61.7	-23.3	7.6	46.0
640.008750	31.2	101.0	V	274.0	47.6	-16.4	14.8	46.0

Remark: 1. Quasi-Peak = Reading value + Correction factor

2. Correction Factor = Antenna factor+ Insertion loss (cable loss+amplifier gain)

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

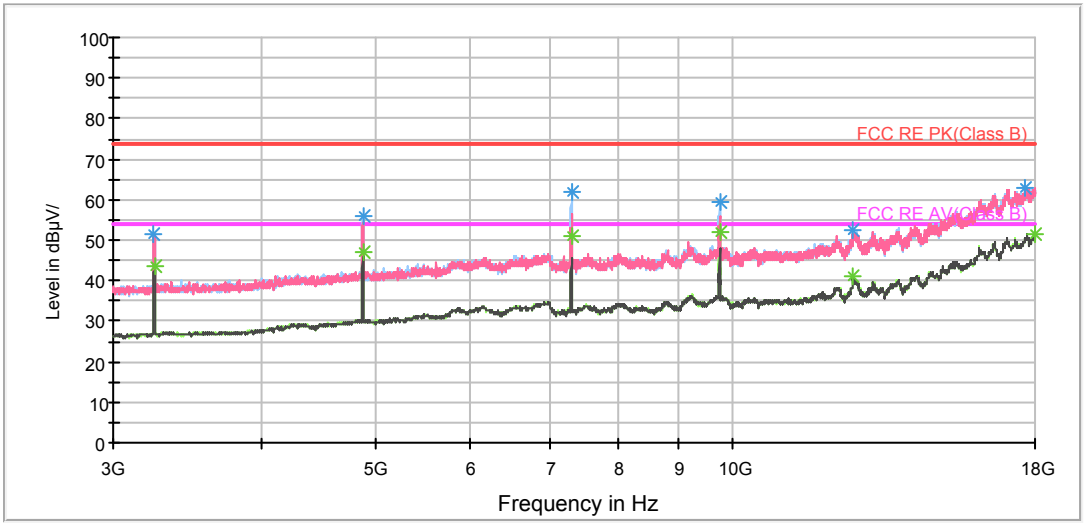
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1195.750000	46.1	101.0	V	165.0	54.3	-8.2	27.9	74
1204.500000	44.0	101.0	V	22.0	52.2	-8.2	30.0	74
1724.250000	41.2	101.0	V	22.0	46.2	-5.0	32.8	74
1997.250000	49.0	101.0	V	0.0	52.3	-3.3	25.0	74
2525.000000	47.2	101.0	V	22.0	47.5	-0.3	26.8	74
2984.250000	47.9	101.0	V	147.0	45.7	2.2	26.1	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1195.750000	29.7	101.0	V	165.0	37.9	-8.2	24.3	54
1279.750000	28.7	101.0	V	22.0	36.3	-7.6	25.3	54
1696.500000	29.7	101.0	V	0.0	34.7	-5.0	24.3	54
1991.750000	32.2	101.0	V	0.0	35.5	-3.3	21.8	54
2518.250000	36.2	101.0	V	22.0	36.5	-0.3	17.8	54
2991.000000	36.9	101.0	H	285.0	34.7	2.2	17.1	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

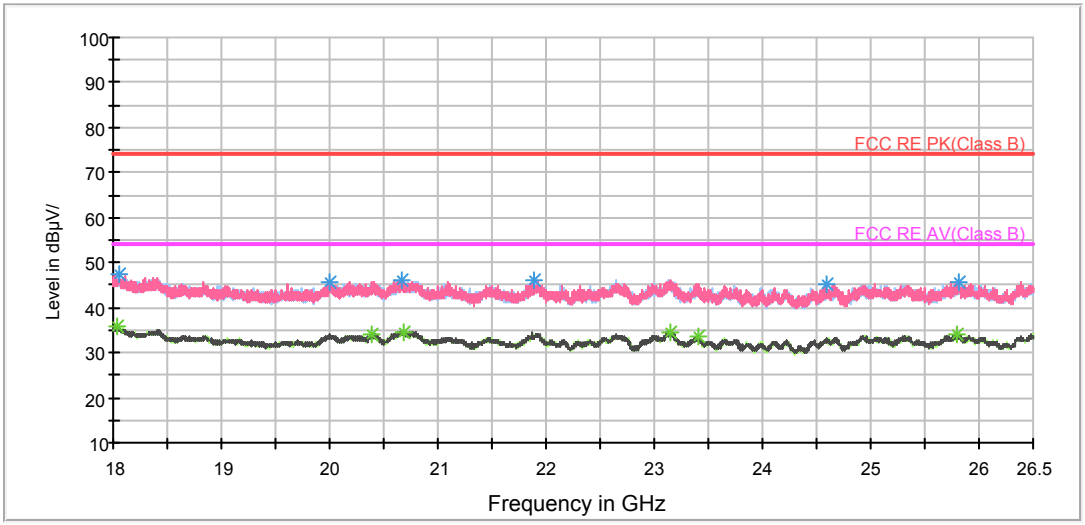
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3247.500000	51.7	200.0	H	155.0	54.2	-2.5	22.3	74
4873.125000	55.7	101.0	H	350.0	53.9	1.8	18.3	74
7310.625000	61.7	200.0	H	137.0	54.7	7.0	12.3	74
9748.125000	59.6	200.0	H	137.0	49.8	9.8	14.4	74
12635.625000	52.5	101.0	H	0.0	38.4	14.1	21.5	74
17656.875000	63.0	101.0	V	154.0	38.6	24.4	11.0	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3249.375000	43.4	200.0	H	155.0	45.9	-2.5	10.6	54
4873.125000	46.9	101.0	H	350.0	45.1	1.8	7.1	54
7310.625000	51.2	200.0	H	137.0	44.2	7.0	2.8	54
9748.125000	51.9	200.0	H	137.0	42.1	9.8	2.1	54
12641.250000	40.9	200.0	H	305.0	26.4	14.5	13.1	54
17998.125000	51.4	101.0	V	0.0	26.0	25.4	2.6	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18059.500000	47.2	H	272.0	49.3	-2.1	26.8	74
19999.625000	45.8	H	166.0	51.5	-5.7	28.2	74
20658.375000	46.3	H	315.0	52.9	-6.6	27.7	74
21893.000000	46.0	H	336.0	54.0	-8.0	28.0	74
24585.375000	45.2	H	261.0	51.2	-6.0	28.8	74
25810.437500	45.8	V	271.0	51.3	-5.5	28.2	74

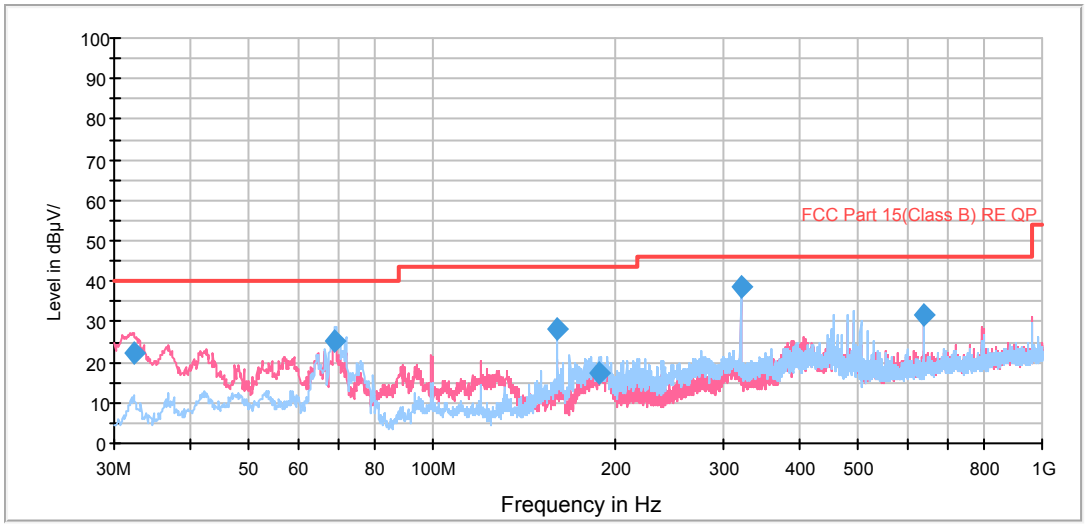
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18039.312500	35.7	H	347.0	37.7	-2.0	18.3	54
20392.750000	34.0	H	0.0	40.1	-6.1	20.0	54
20688.125000	34.6	V	98.0	41.3	-6.7	19.4	54
23149.937500	34.6	H	305.0	40.7	-6.1	19.4	54
23398.562500	33.4	H	123.0	39.3	-5.9	20.6	54
25791.312500	34.1	V	0.0	39.6	-5.5	19.9	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11b CH11

RE 30M-1GHz QP



Radiates Emission from 30MHz to 1GHz

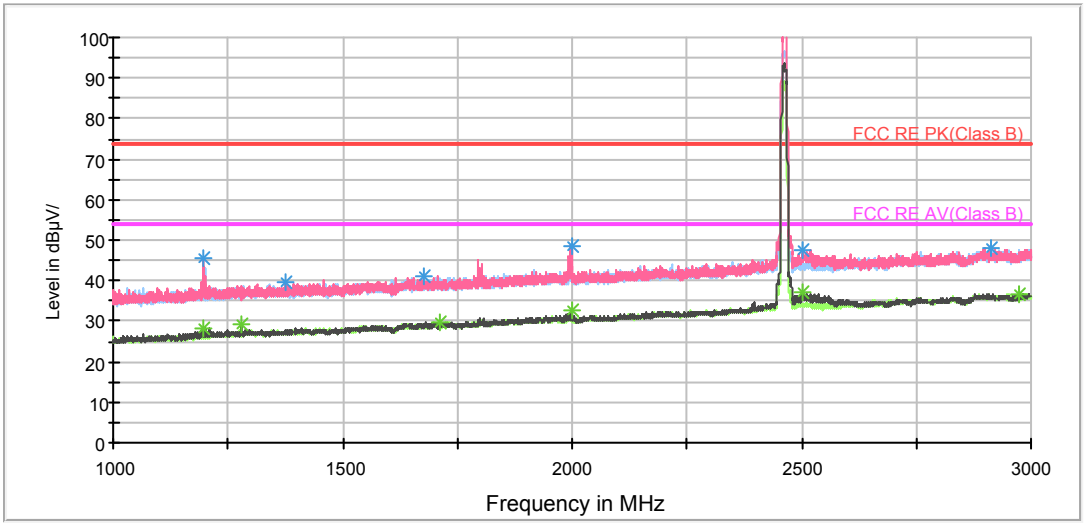
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
32.262956	22.5	121.0	V	26.0	45.0	-22.5	17.5	40.0
69.111788	25.3	101.0	H	7.0	51.5	-26.2	14.7	40.0
159.980050	28.2	126.0	H	34.0	56.9	-28.7	15.3	43.5
186.990256	17.3	126.0	H	77.0	44.7	-27.4	26.2	43.5
319.990000	38.6	101.0	H	264.0	61.9	-23.3	7.4	46.0
640.008750	31.7	101.0	V	270.0	48.1	-16.4	14.3	46.0

Remark: 1. Quasi-Peak = Reading value + Correction factor

2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

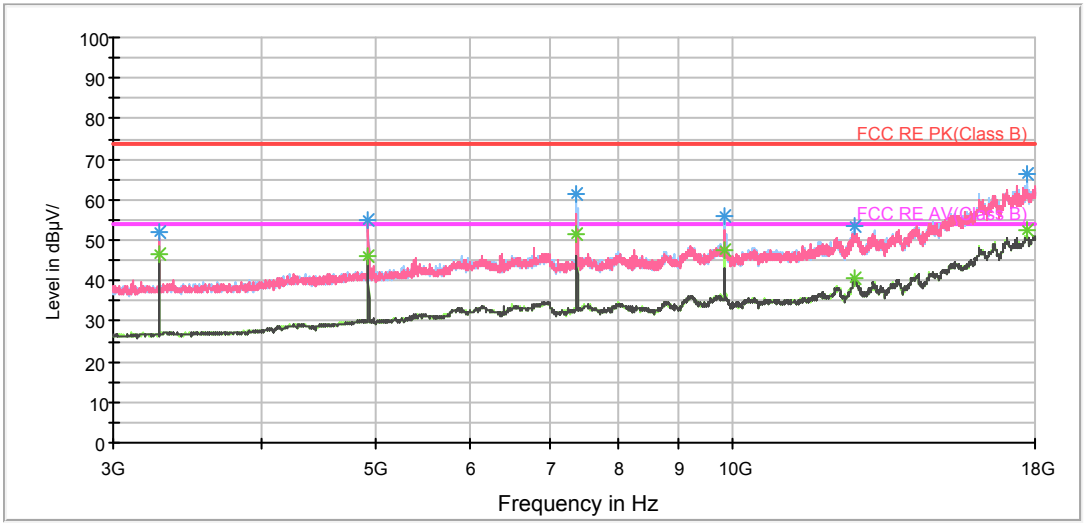
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1195.000000	45.7	101.0	V	8.0	53.9	-8.2	28.3	74
1376.250000	39.7	101.0	V	45.0	46.8	-7.1	34.3	74
1678.750000	41.1	101.0	H	246.0	46.2	-5.1	32.9	74
1998.500000	48.7	101.0	V	0.0	52.1	-3.4	25.3	74
2504.250000	47.5	101.0	V	17.0	47.7	-0.2	26.5	74
2911.250000	48.1	101.0	H	0.0	46.2	1.9	25.9	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1196.750000	28.4	101.0	V	151.0	36.6	-8.2	25.6	54
1280.000000	29.3	101.0	V	151.0	36.9	-7.6	24.7	54
1713.750000	29.9	101.0	H	96.0	34.8	-4.9	24.1	54
1998.500000	32.9	101.0	V	0.0	36.3	-3.4	21.1	54
2503.500000	37.1	101.0	V	8.0	37.3	-0.2	16.9	54
2973.250000	36.7	101.0	H	272.0	34.5	2.2	17.3	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3281.250000	52.2	200.0	H	153.0	54.3	-2.1	21.8	74
4923.750000	55.0	200.0	H	325.0	53.1	1.9	19.0	74
7385.625000	61.5	200.0	H	136.0	54.5	7.0	12.5	74
9847.500000	56.1	200.0	H	136.0	45.8	10.3	17.9	74
12678.750000	53.5	200.0	H	8.0	39.3	14.2	20.5	74
17700.000000	66.2	200.0	H	8.0	41.5	24.7	7.8	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3281.250000	46.7	200.0	H	153.0	48.8	-2.1	7.3	54
4923.750000	46.1	200.0	H	325.0	44.2	1.9	7.9	54
7385.625000	51.2	200.0	H	136.0	44.2	7.0	2.8	54
9847.500000	47.8	200.0	H	136.0	37.5	10.3	6.2	54
12680.625000	40.6	200.0	H	8.0	26.3	14.3	13.4	54
17700.000000	52.5	200.0	H	8.0	27.8	24.7	1.5	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18028.687500	47.2	H	197.0	49.1	-1.9	26.8	74
20015.562500	46.1	V	186.0	51.8	-5.7	27.9	74
20830.500000	46.6	H	134.0	53.6	-7.0	27.4	74
23148.875000	46.4	V	13.0	52.5	-6.1	27.6	74
24673.562500	45.9	H	337.0	51.9	-6.0	28.1	74
25267.500000	45.8	H	0.0	51.6	-5.8	28.2	74

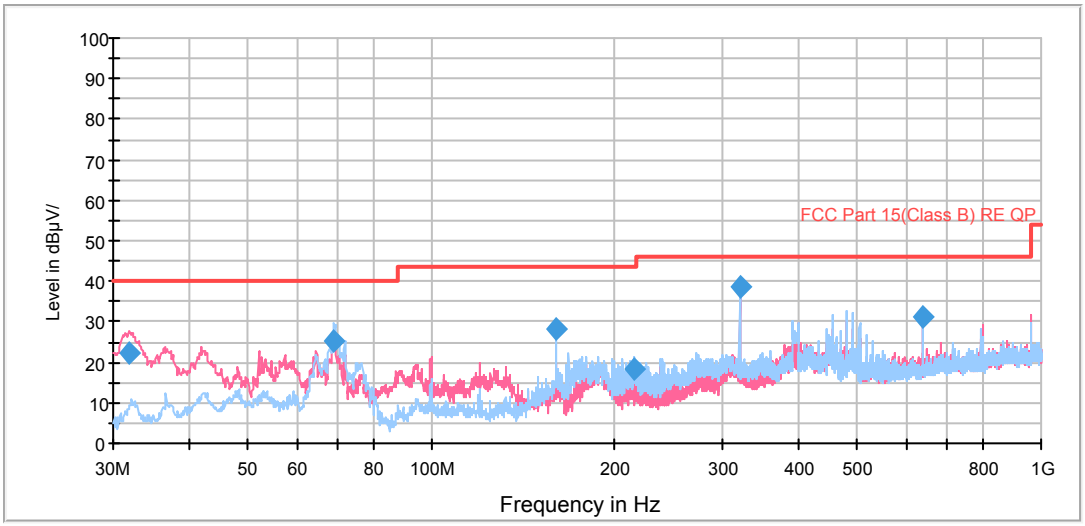
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18017.000000	35.9	V	57.0	37.8	-1.9	18.1	54
20417.187500	34.1	H	208.0	40.2	-6.1	19.9	54
20647.750000	34.6	V	3.0	41.2	-6.6	19.4	54
23151.000000	34.7	V	261.0	40.8	-6.1	19.3	54
23415.562500	33.5	H	347.0	39.4	-5.9	20.5	54
25796.625000	34.1	V	24.0	39.6	-5.5	19.9	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11g CH1

RE 30M-1GHz QP



Radiates Emission from 30MHz to 1GHz

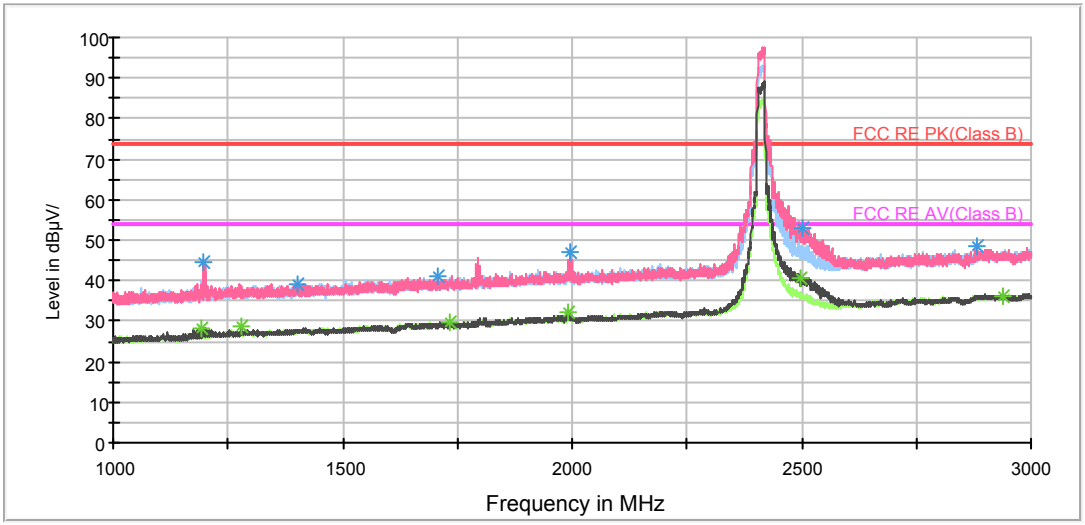
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
31.898297	22.1	121.0	V	33.0	44.6	-22.5	17.9	40.0
69.070840	25.3	101.0	H	8.0	51.4	-26.1	14.7	40.0
159.980050	28.2	126.0	H	30.0	56.9	-28.7	15.3	43.5
214.928750	18.3	126.0	H	68.0	43.9	-25.6	25.2	43.5
319.990000	38.7	101.0	H	267.0	62.0	-23.3	7.3	46.0
640.008750	31.0	101.0	V	275.0	47.4	-16.4	15.0	46.0

Remark: 1. Quasi-Peak = Reading value + Correction factor

2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

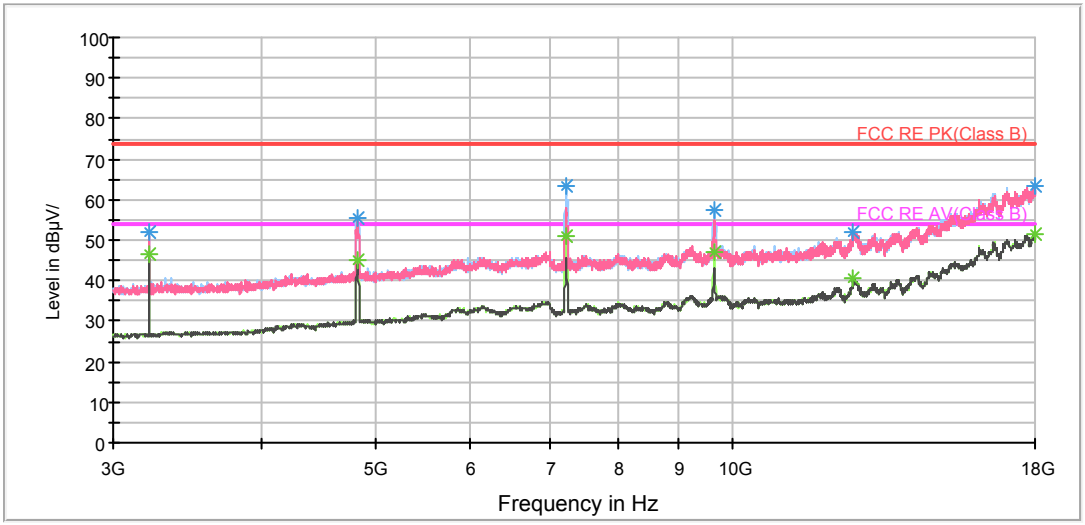
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1194.750000	44.5	101.0	V	133.0	52.7	-8.2	29.5	74
1401.250000	39.2	101.0	V	19.0	46.3	-7.1	34.8	74
1706.750000	40.9	101.0	V	169.0	45.8	-4.9	33.1	74
1997.000000	47.1	101.0	V	0.0	50.4	-3.3	26.9	74
2504.000000	53.1	101.0	V	0.0	53.3	-0.2	20.9	74
2884.250000	48.3	101.0	V	204.0	46.1	2.2	25.7	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1193.500000	28.4	101.0	V	169.0	36.6	-8.2	25.6	54
1280.000000	28.8	101.0	V	0.0	36.4	-7.6	25.2	54
1731.750000	29.7	101.0	H	122.0	34.5	-4.8	24.3	54
1991.250000	31.9	101.0	V	169.0	35.2	-3.3	22.1	54
2499.500000	40.8	101.0	V	19.0	41.0	-0.2	13.2	54
2937.750000	36.3	101.0	V	305.0	34.4	1.9	17.7	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

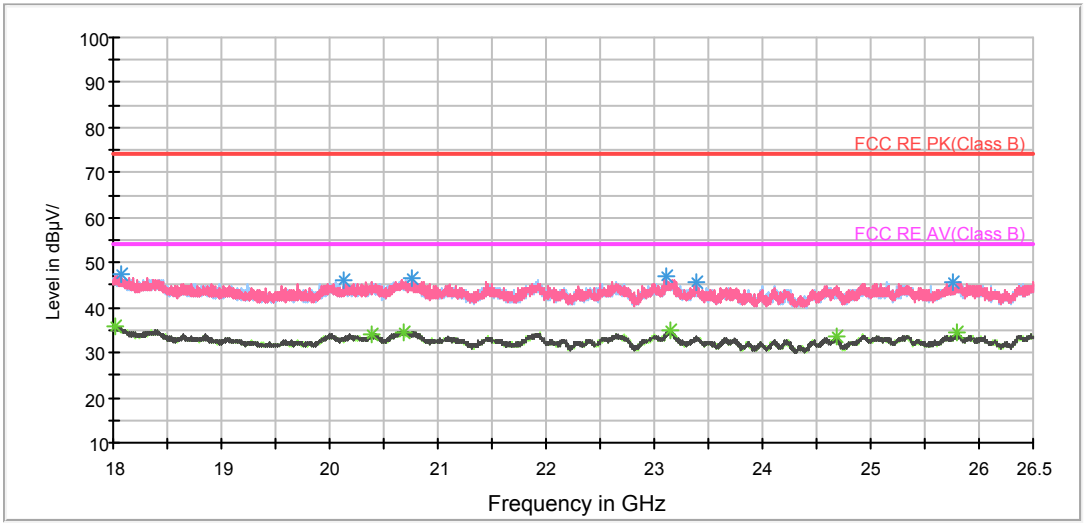
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3215.625000	51.8	200.0	H	156.0	54.6	-2.8	22.2	74
4826.250000	55.6	200.0	H	0.0	54.2	1.4	18.4	74
7231.875000	63.2	200.0	H	0.0	56.5	6.7	10.8	74
9641.250000	57.6	200.0	H	137.0	47.7	9.9	16.4	74
12641.250000	51.9	101.0	V	0.0	37.4	14.5	22.1	74
17998.125000	63.4	200.0	V	222.0	38.0	25.4	10.6	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3215.625000	46.7	200.0	H	156.0	49.5	-2.8	7.3	54
4822.500000	45.1	200.0	H	0.0	43.8	1.3	8.9	54
7235.625000	51.0	200.0	H	137.0	44.2	6.8	3.0	54
9648.750000	47.0	200.0	H	137.0	37.2	9.8	7.0	54
12641.250000	40.5	200.0	V	241.0	26.0	14.5	13.5	54
18000.000000	51.2	101.0	V	30.0	25.7	25.5	2.8	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

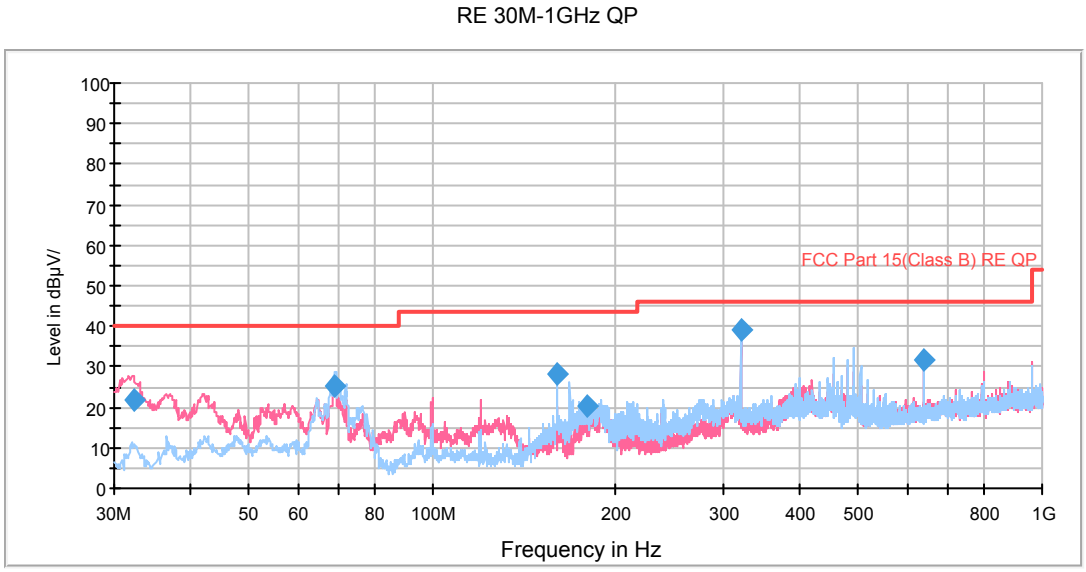
Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18078.625000	47.4	V	40.0	49.5	-2.1	26.6	74
20129.250000	45.9	H	156.0	51.7	-5.8	28.1	74
20767.812500	46.4	V	250.0	53.3	-6.9	27.6	74
23119.125000	46.8	H	324.0	52.9	-6.1	27.2	74
23385.812500	45.5	V	166.0	51.4	-5.9	28.5	74
25765.812500	45.9	V	197.0	51.5	-5.6	28.1	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18021.250000	35.9	H	0.0	37.8	-1.9	18.1	54
20390.625000	34.1	V	113.0	40.2	-6.1	19.9	54
20683.875000	34.7	H	218.0	41.3	-6.6	19.3	54
23151.000000	35.2	V	0.0	41.3	-6.1	18.8	54
24687.375000	33.5	V	0.0	39.5	-6.0	20.5	54
25791.312500	34.3	H	324.0	39.8	-5.5	19.7	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11g CH6



Radiates Emission from 30MHz to 1GHz

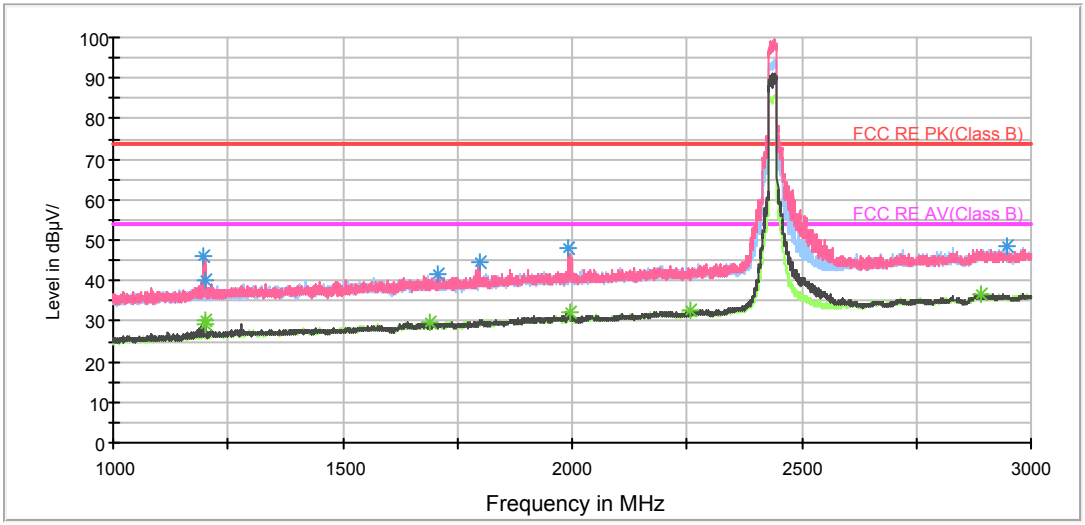
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
32.302990	22.0	101.0	V	54.0	44.5	-22.5	18.0	40.0
69.110840	25.4	101.0	H	7.0	51.6	-26.2	14.6	40.0
159.980050	28.0	126.0	H	40.0	56.7	-28.7	15.5	43.5
178.888710	20.2	126.0	H	68.0	48.5	-28.3	23.3	43.5
319.990000	38.9	101.0	H	271.0	62.2	-23.3	7.1	46.0
640.008750	31.8	101.0	V	270.0	48.2	-16.4	14.2	46.0

Remark: 1. Quasi-Peak = Reading value + Correction factor

2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

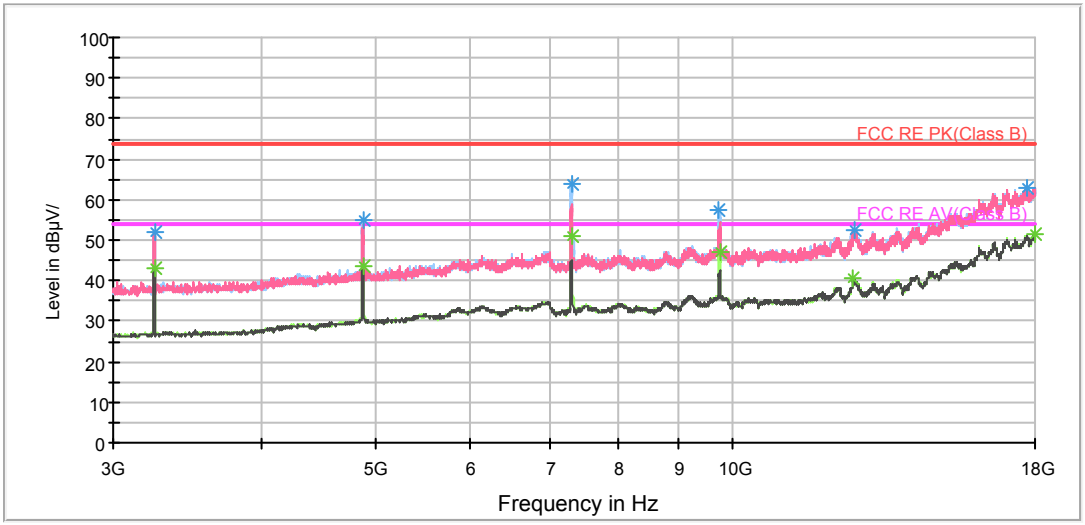
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1195.250000	46.1	101.0	V	172.0	54.3	-8.2	27.9	74
1201.750000	40.3	101.0	V	164.0	48.5	-8.2	33.7	74
1707.500000	41.5	101.0	V	0.0	46.3	-4.8	32.5	74
1800.000000	44.7	101.0	V	0.0	48.6	-3.9	29.3	74
1993.000000	48.0	101.0	V	0.0	51.3	-3.3	26.0	74
2948.250000	48.5	101.0	H	0.0	46.5	2.0	25.5	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1200.750000	29.1	101.0	V	147.0	37.3	-8.2	24.9	54
1201.750000	30.0	101.0	V	164.0	38.2	-8.2	24.0	54
1690.750000	29.6	101.0	V	94.0	34.6	-5.0	24.4	54
1993.500000	32.4	101.0	V	164.0	35.7	-3.3	21.6	54
2258.250000	32.7	101.0	V	21.0	34.8	-2.1	21.3	54
2891.750000	36.4	101.0	V	38.0	34.3	2.1	17.6	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

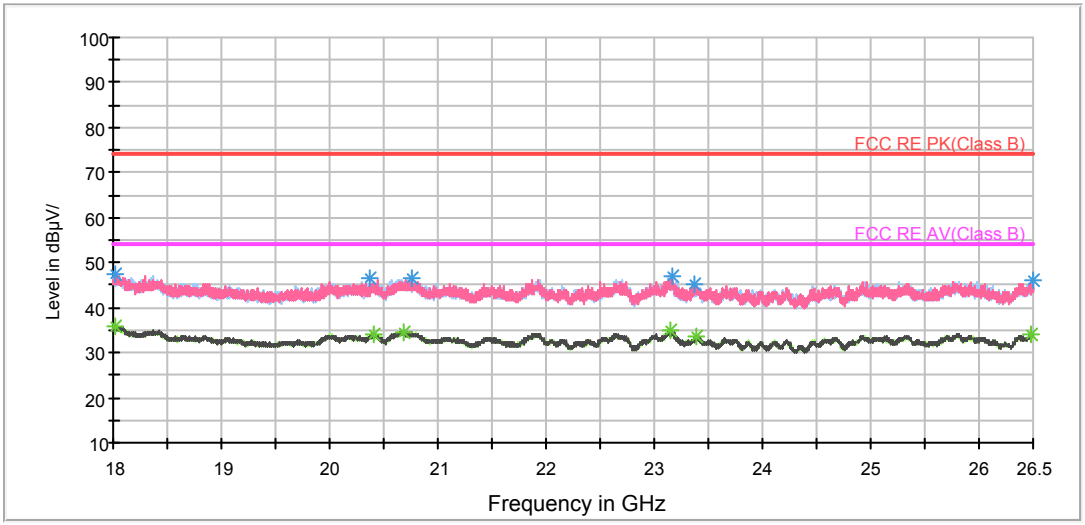
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3249.375000	51.9	200.0	H	158.0	54.4	-2.5	22.1	74
4873.125000	54.7	200.0	H	0.0	52.9	1.8	19.3	74
7316.250000	64.1	200.0	H	139.0	57.1	7.0	9.9	74
9740.625000	57.2	200.0	H	139.0	47.2	10.0	16.8	74
12699.375000	52.2	101.0	H	0.0	38.1	14.1	21.8	74
17715.000000	63.0	101.0	H	347.0	38.4	24.6	11.0	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3249.375000	43.2	200.0	H	158.0	45.7	-2.5	10.8	54
4873.125000	43.6	101.0	H	347.0	41.8	1.8	10.4	54
7310.625000	50.8	200.0	H	139.0	43.8	7.0	3.2	54
9748.125000	46.8	200.0	H	139.0	37.0	9.8	7.2	54
12641.250000	40.5	101.0	H	292.0	26.0	14.5	13.5	54
17998.125000	51.2	200.0	H	305.0	25.8	25.4	2.8	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18024.437500	47.4	V	0.0	49.3	-1.9	26.6	74
20378.937500	46.6	H	177.0	52.7	-6.1	27.4	74
20763.562500	46.3	V	260.0	53.1	-6.8	27.7	74
23172.250000	46.9	V	2.0	53.0	-6.1	27.1	74
23373.062500	45.4	V	121.0	51.3	-5.9	28.6	74
26496.812500	46.3	V	0.0	51.7	-5.4	27.7	74

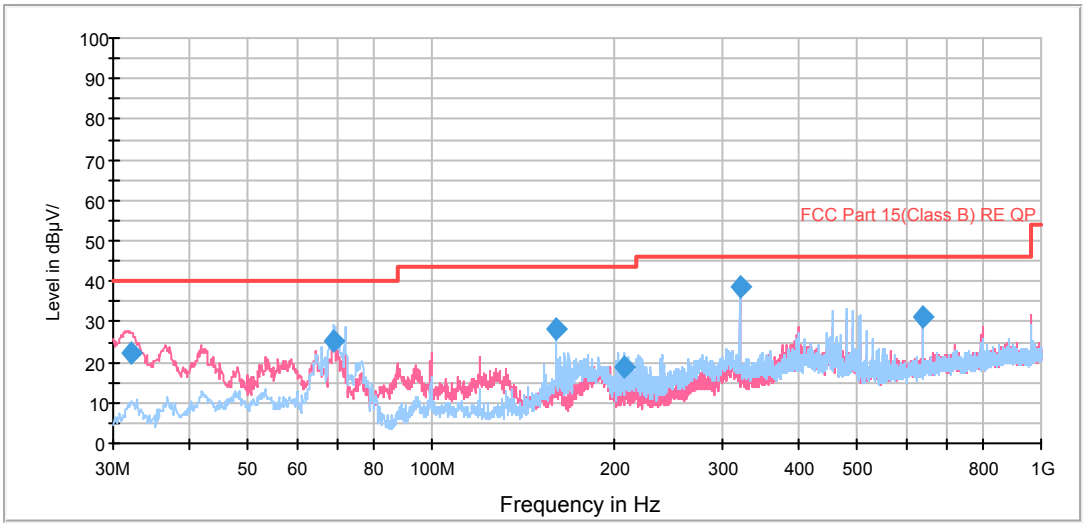
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18023.375000	35.9	H	312.0	37.8	-1.9	18.1	54
20399.125000	34.0	H	291.0	40.1	-6.1	20.0	54
20683.875000	34.7	H	312.0	41.3	-6.6	19.3	54
23147.812500	34.9	V	0.0	41.0	-6.1	19.1	54
23395.375000	33.6	H	0.0	39.5	-5.9	20.4	54
26481.937500	34.2	V	249.0	39.6	-5.4	19.8	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11g CH11

RE 30M-1GHz QP



Radiates Emission from 30MHz to 1GHz

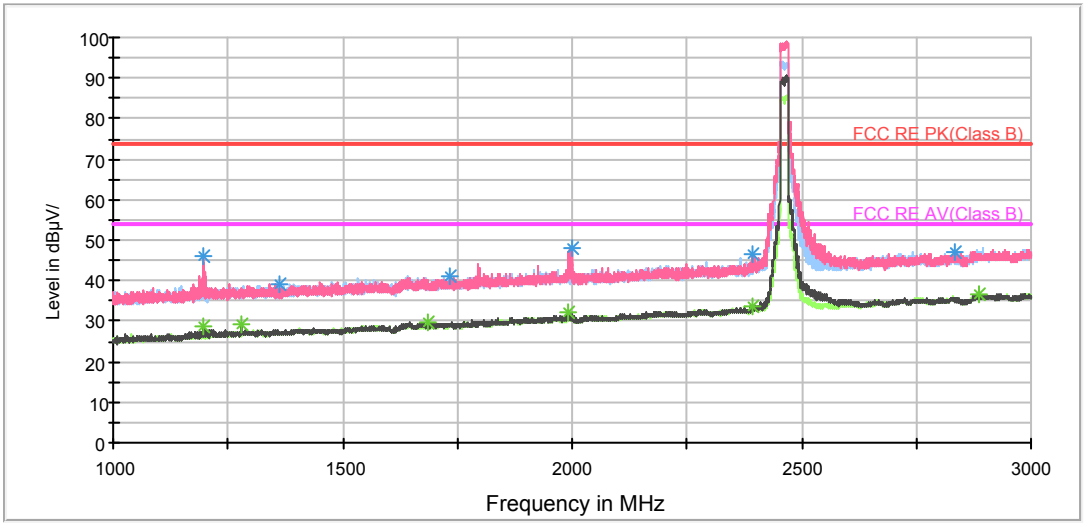
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
32.019850	22.2	121.0	V	14.0	44.7	-22.5	17.8	40.0
69.109894	25.2	101.0	H	15.0	51.4	-26.2	14.8	40.0
159.980050	28.1	126.0	H	37.0	56.8	-28.7	15.4	43.5
207.551000	18.8	126.0	H	74.0	44.9	-26.1	24.7	43.5
319.990000	38.6	101.0	H	271.0	61.9	-23.3	7.4	46.0
640.008750	31.4	101.0	V	273.0	47.8	-16.4	14.6	46.0

Remark: 1. Quasi-Peak = Reading value + Correction factor

2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

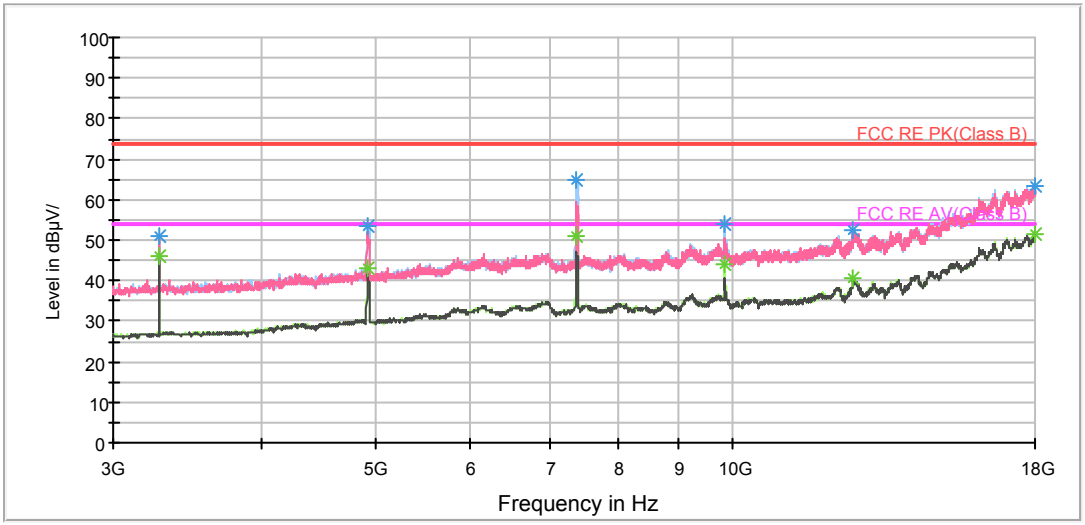
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1196.250000	46.3	101.0	V	156.0	54.5	-8.2	27.7	74
1361.500000	39.1	101.0	H	324.0	46.5	-7.4	34.9	74
1731.750000	41.1	101.0	H	351.0	45.9	-4.8	32.9	74
1999.500000	48.1	101.0	V	0.0	51.5	-3.4	25.9	74
2394.000000	46.7	101.0	V	86.0	48.0	-1.3	27.3	74
2835.500000	47.2	101.0	V	247.0	45.7	1.5	26.8	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1197.500000	28.6	101.0	V	78.0	36.8	-8.2	25.4	54
1280.000000	29.2	101.0	V	175.0	36.8	-7.6	24.8	54
1686.500000	29.6	101.0	V	44.0	34.6	-5.0	24.4	54
1990.750000	32.2	101.0	V	0.0	35.5	-3.3	21.8	54
2394.750000	33.7	101.0	V	112.0	35.0	-1.3	20.3	54
2888.000000	36.6	101.0	V	184.0	34.4	2.2	17.4	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

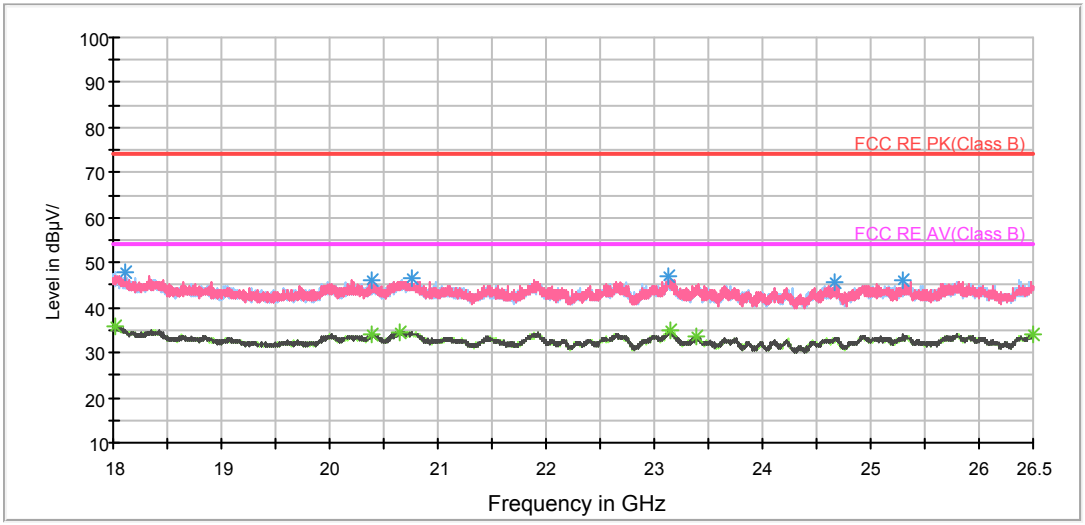
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3281.250000	51.2	200.0	H	157.0	53.3	-2.1	22.8	74
4925.625000	53.6	200.0	H	139.0	51.7	1.9	20.4	74
7391.250000	65.0	200.0	H	139.0	58.1	6.9	9.0	74
9843.750000	54.0	200.0	H	30.0	43.8	10.2	20.0	74
12641.250000	52.6	200.0	H	0.0	38.1	14.5	21.4	74
17998.125000	63.4	101.0	H	168.0	38.0	25.4	10.6	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3281.250000	46.2	200.0	H	157.0	48.3	-2.1	7.8	54
4923.750000	43.0	101.0	H	351.0	41.1	1.9	11.0	54
7387.500000	51.2	200.0	H	139.0	44.2	7.0	2.8	54
9847.500000	44.0	200.0	H	139.0	33.7	10.3	10.0	54
12641.250000	40.4	100.0	V	63.0	25.9	14.5	13.6	54
18000.000000	51.5	101.0	H	0.0	26.0	25.5	2.5	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18109.437500	47.8	V	0.0	50.1	-2.3	26.2	74
20397.000000	46.2	H	178.0	52.3	-6.1	27.8	74
20762.500000	46.3	V	0.0	53.1	-6.8	27.7	74
23131.875000	46.8	H	348.0	52.9	-6.1	27.2	74
24675.687500	45.6	V	16.0	51.6	-6.0	28.4	74
25294.062500	46.2	H	242.0	52.0	-5.8	27.8	74

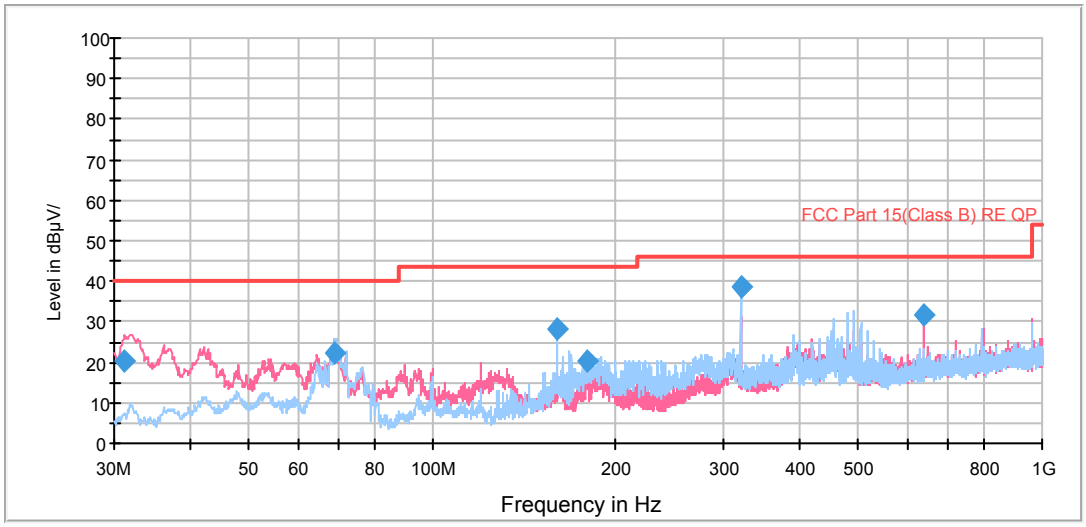
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18023.375000	35.7	V	142.0	37.6	-1.9	18.3	54
20394.875000	34.0	V	121.0	40.1	-6.1	20.0	54
20645.625000	34.7	V	131.0	41.3	-6.6	19.3	54
23153.125000	34.9	H	178.0	41.0	-6.1	19.1	54
23382.625000	33.5	V	68.0	39.4	-5.9	20.5	54
26500.000000	34.2	H	22.0	39.7	-5.5	19.8	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT20) CH1

RE 30M-1GHz QP



Radiates Emission from 30MHz to 1GHz

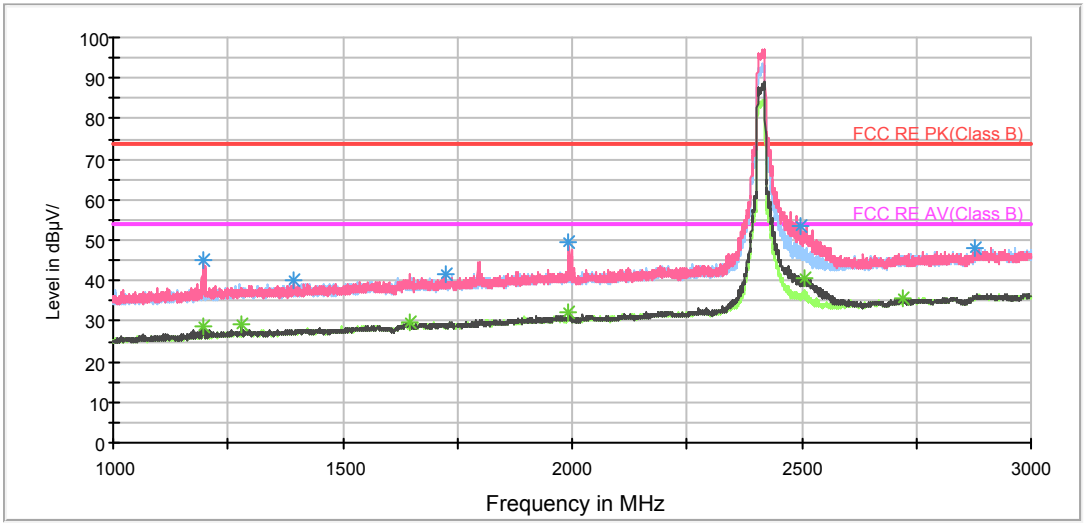
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
31.174469	20.3	101.0	V	291.0	42.8	-22.5	19.7	40.0
69.111788	22.1	101.0	H	181.0	48.3	-26.2	17.9	40.0
159.980050	28.2	126.0	H	28.0	56.9	-28.7	15.3	43.5
178.886816	20.2	126.0	H	72.0	48.5	-28.3	23.3	43.5
319.990000	38.8	101.0	H	272.0	62.1	-23.3	7.2	46.0
640.008750	31.8	101.0	V	271.0	48.2	-16.4	14.2	46.0

Remark: 1. Quasi-Peak = Reading value + Correction factor

2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

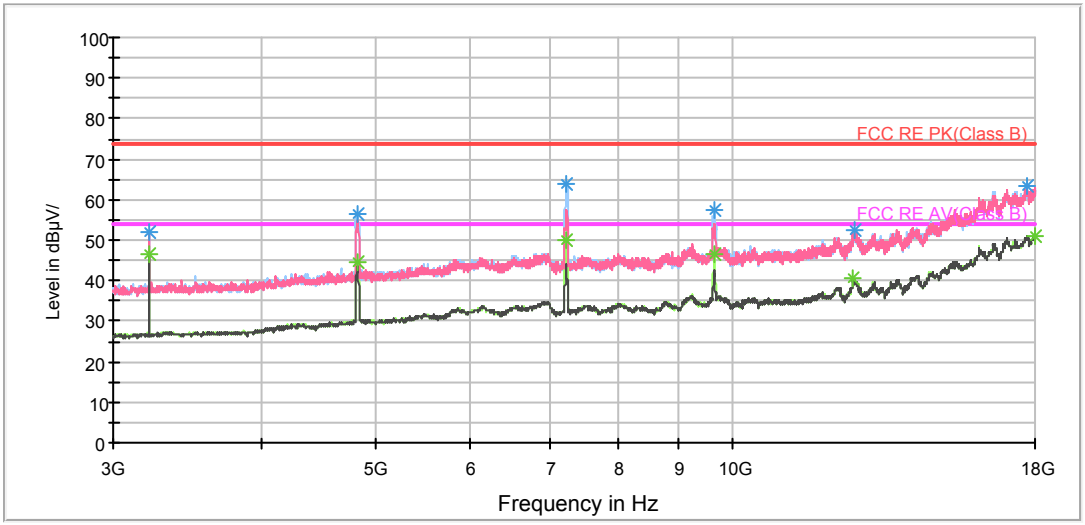
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1196.500000	45.0	101.0	V	162.0	53.2	-8.2	29.0	74
1395.000000	40.1	101.0	V	0.0	47.2	-7.1	33.9	74
1726.500000	41.8	101.0	V	109.0	46.9	-5.1	32.2	74
1993.250000	49.8	101.0	V	0.0	53.1	-3.3	24.2	74
2499.750000	53.6	101.0	V	12.0	53.8	-0.2	20.4	74
2878.000000	47.8	101.0	H	335.0	45.5	2.3	26.2	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1197.500000	28.8	101.0	V	12.0	37.0	-8.2	25.2	54
1280.000000	29.2	101.0	V	12.0	36.8	-7.6	24.8	54
1645.000000	29.8	101.0	V	179.0	34.7	-4.9	24.2	54
1991.750000	32.3	101.0	V	0.0	35.6	-3.3	21.7	54
2507.500000	40.8	101.0	V	30.0	41.0	-0.2	13.2	54
2721.750000	35.7	101.0	V	134.0	35.4	0.3	18.3	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

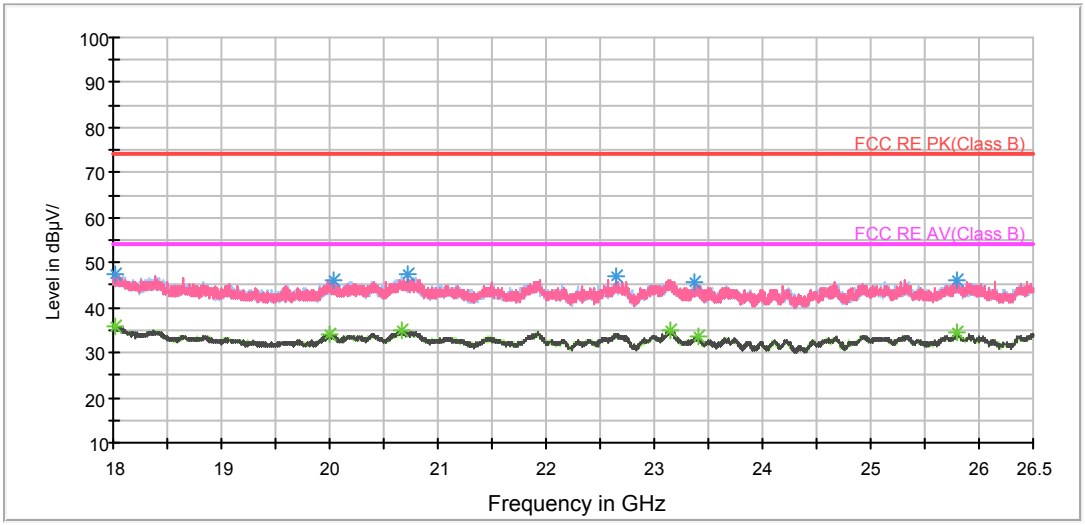
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3215.625000	52.1	100.0	V	136.0	54.9	-2.8	21.9	74
4826.250000	56.4	200.0	H	344.0	55.0	1.4	17.6	74
7233.750000	63.7	200.0	H	0.0	56.9	6.8	10.3	74
9646.875000	57.5	200.0	H	139.0	47.7	9.8	16.5	74
12680.625000	52.5	200.0	H	0.0	38.2	14.3	21.5	74
17720.625000	63.1	200.0	H	194.0	38.5	24.6	10.9	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3215.625000	46.6	100.0	V	136.0	49.4	-2.8	7.4	54
4822.500000	44.7	200.0	H	344.0	43.4	1.3	9.3	54
7235.625000	50.2	200.0	H	139.0	43.4	6.8	3.8	54
9648.750000	46.5	200.0	H	139.0	36.7	9.8	7.5	54
12641.250000	40.4	100.0	V	23.0	25.9	14.5	13.6	54
17996.250000	51.2	200.0	V	277.0	25.8	25.4	2.8	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18017.000000	47.6	H	0.0	49.5	-1.9	26.4	74
20028.312500	46.1	V	132.0	51.8	-5.7	27.9	74
20714.687500	47.3	V	0.0	54.0	-6.7	26.7	74
22653.750000	46.8	H	134.0	53.4	-6.6	27.2	74
23369.875000	45.7	V	15.0	51.6	-5.9	28.3	74
25805.125000	46.2	V	5.0	51.7	-5.5	27.8	74

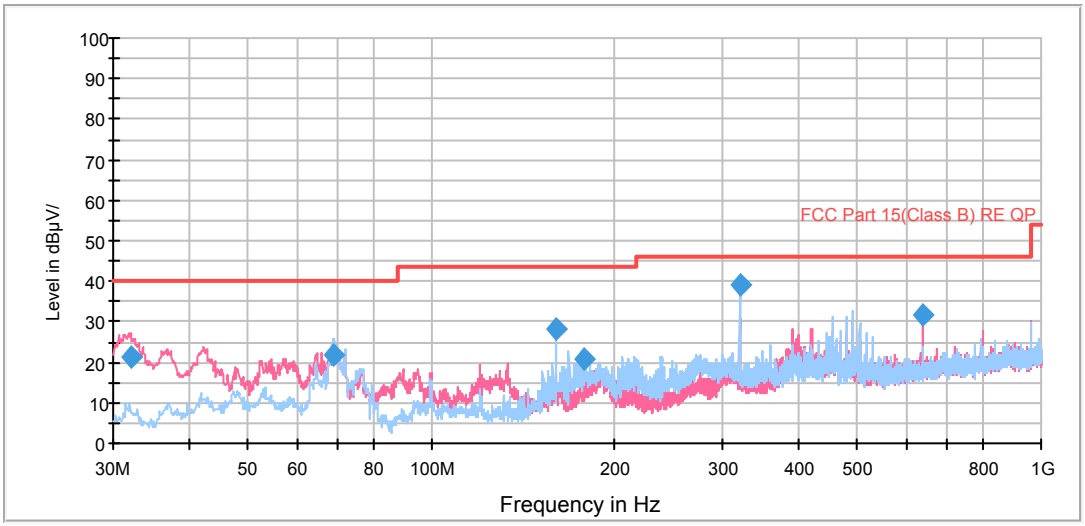
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18018.062500	35.7	V	48.0	37.6	-1.9	18.3	54
20009.187500	34.2	H	134.0	39.9	-5.7	19.8	54
20662.625000	34.9	V	36.0	41.5	-6.6	19.1	54
23151.000000	34.9	V	48.0	41.0	-6.1	19.1	54
23399.625000	33.5	V	205.0	39.4	-5.9	20.5	54
25804.062500	34.3	V	195.0	39.8	-5.5	19.7	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT20) CH6

RE 30M-1GHz QP



Radiates Emission from 30MHz to 1GHz

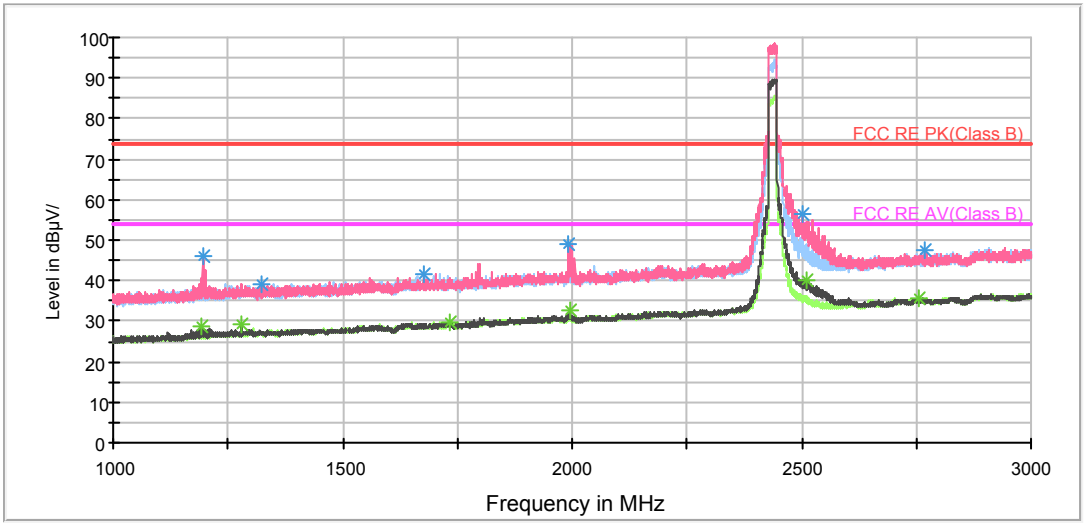
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
32.021097	21.5	122.0	V	90.0	44.0	-22.5	18.5	40.0
69.109894	21.9	101.0	H	197.0	48.1	-26.2	18.1	40.0
159.980050	28.2	126.0	H	35.0	56.9	-28.7	15.3	43.5
177.435453	20.7	126.0	H	70.0	49.1	-28.4	22.8	43.5
319.990000	39.0	101.0	H	266.0	62.3	-23.3	7.0	46.0
640.008750	31.8	101.0	V	271.0	48.2	-16.4	14.2	46.0

Remark: 1. Quasi-Peak = Reading value + Correction factor

2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

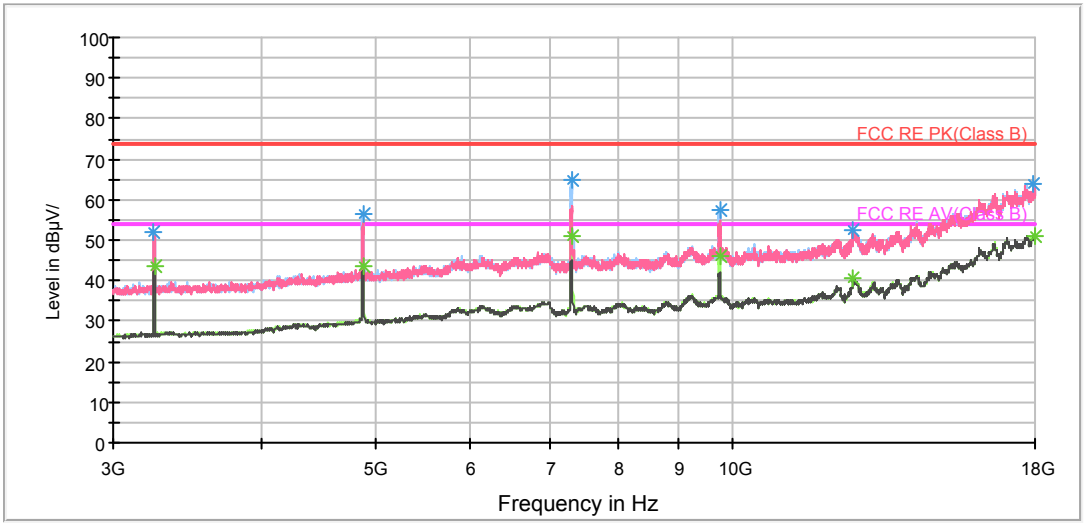
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1197.000000	46.0	101.0	V	166.0	54.2	-8.2	28.0	74
1324.500000	39.2	101.0	V	0.0	46.6	-7.4	34.8	74
1675.750000	41.5	101.0	V	219.0	46.6	-5.1	32.5	74
1991.000000	49.2	101.0	V	0.0	52.5	-3.3	24.8	74
2502.500000	56.4	101.0	V	26.0	56.6	-0.2	17.6	74
2769.750000	47.4	101.0	V	52.0	46.6	0.8	26.6	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1191.750000	28.5	101.0	V	113.0	36.7	-8.2	25.5	54
1280.000000	29.0	101.0	V	166.0	36.6	-7.6	25.0	54
1732.000000	29.8	101.0	H	0.0	34.6	-4.8	24.2	54
1997.000000	32.5	101.0	V	0.0	35.8	-3.3	21.5	54
2509.000000	40.2	101.0	V	8.0	40.4	-0.2	13.8	54
2755.500000	35.6	101.0	V	121.0	34.7	0.9	18.4	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

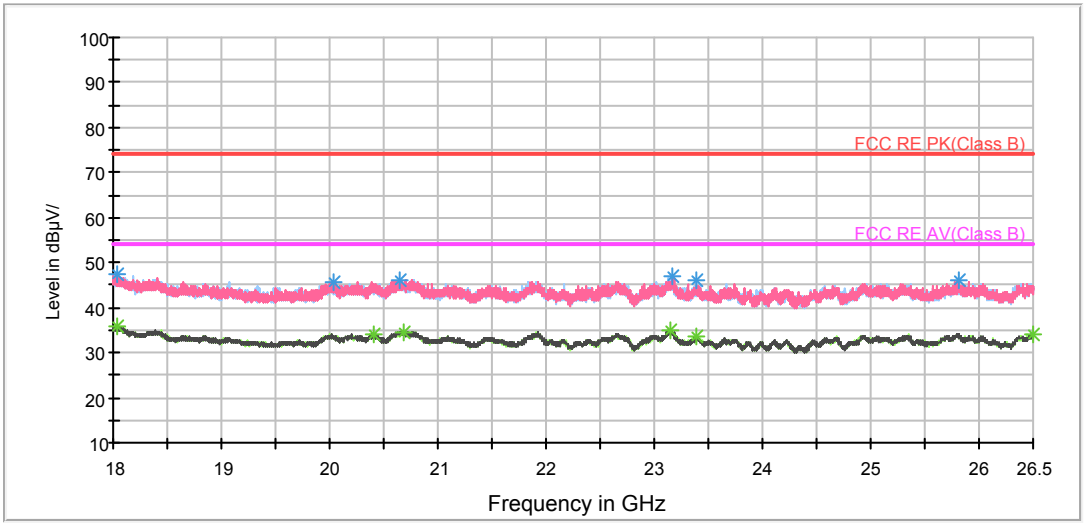
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3247.500000	51.9	200.0	H	155.0	54.4	-2.5	22.1	74
4873.125000	56.4	200.0	H	0.0	54.6	1.8	17.6	74
7306.875000	65.1	200.0	H	137.0	58.1	7.0	8.9	74
9748.125000	57.6	200.0	H	29.0	47.8	9.8	16.4	74
12639.375000	52.3	200.0	V	260.0	37.8	14.5	21.7	74
17917.500000	63.8	200.0	H	229.0	38.1	25.7	10.2	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3249.375000	43.4	200.0	H	155.0	45.9	-2.5	10.6	54
4873.125000	43.4	200.0	H	0.0	41.6	1.8	10.6	54
7310.625000	51.0	200.0	H	137.0	44.0	7.0	3.0	54
9748.125000	46.3	200.0	H	29.0	36.5	9.8	7.7	54
12639.375000	40.5	100.0	V	11.0	26.0	14.5	13.5	54
18000.000000	51.1	200.0	H	192.0	25.6	25.5	2.9	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

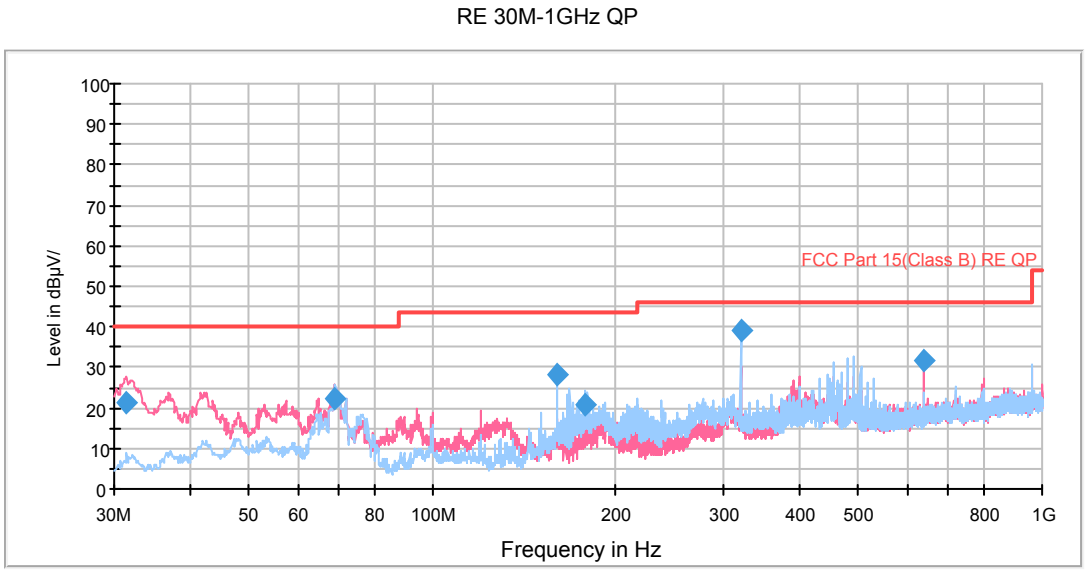
Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18042.500000	47.4	V	92.0	49.4	-2.0	26.6	74
20031.500000	45.8	V	0.0	51.5	-5.7	28.2	74
20657.312500	46.3	H	90.0	52.9	-6.6	27.7	74
23170.125000	46.8	V	40.0	52.9	-6.1	27.2	74
23386.875000	46.0	H	34.0	51.9	-5.9	28.0	74
25820.000000	46.0	V	19.0	51.5	-5.5	28.0	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18037.187500	35.7	H	0.0	37.7	-2.0	18.3	54
20409.750000	34.1	H	133.0	40.2	-6.1	19.9	54
20683.875000	34.7	H	207.0	41.3	-6.6	19.3	54
23156.312500	34.9	V	92.0	41.0	-6.1	19.1	54
23383.687500	33.4	H	0.0	39.3	-5.9	20.6	54
26492.562500	34.1	H	346.0	39.5	-5.4	19.9	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT20) CH11



Radiates Emission from 30MHz to 1GHz

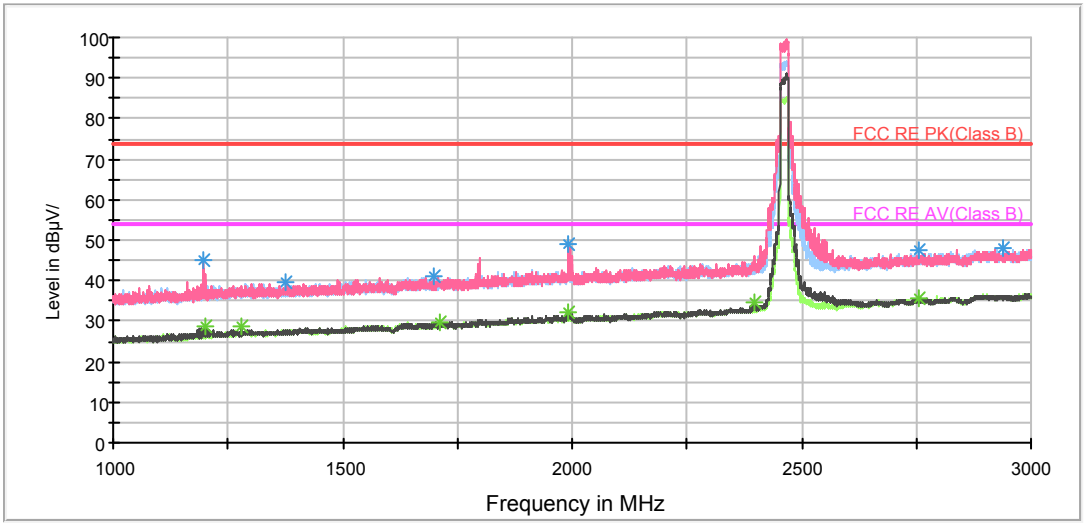
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
31.456362	21.3	101.0	V	281.0	43.8	-22.5	18.7	40.0
69.070840	22.2	101.0	H	185.0	48.3	-26.1	17.8	40.0
159.980050	28.2	126.0	H	28.0	56.9	-28.7	15.3	43.5
177.436400	20.7	126.0	H	72.0	49.1	-28.4	22.8	43.5
319.990000	38.9	100.0	H	267.0	62.2	-23.3	7.1	46.0
640.008750	31.9	101.0	V	269.0	48.3	-16.4	14.1	46.0

Remark: 1. Quasi-Peak = Reading value + Correction factor

2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

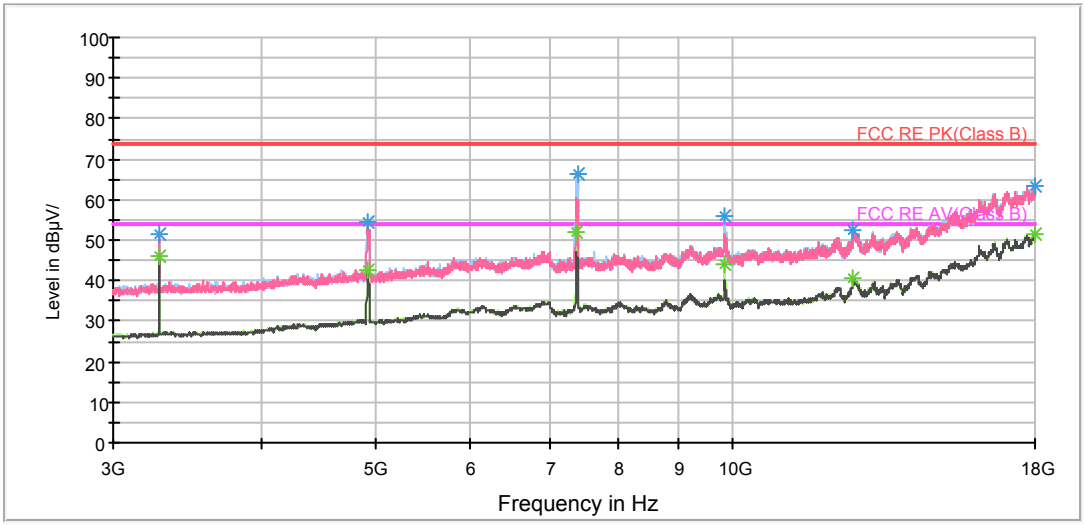
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1194.750000	45.1	101.0	V	150.0	53.3	-8.2	28.9	74
1376.250000	39.6	101.0	H	295.0	46.7	-7.1	34.4	74
1699.750000	41.1	101.0	V	88.0	46.1	-5.0	32.9	74
1991.750000	48.9	101.0	V	3.0	52.2	-3.3	25.1	74
2754.000000	47.4	101.0	H	0.0	46.5	0.9	26.6	74
2938.500000	48.2	101.0	H	0.0	46.3	1.9	25.8	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1199.750000	28.8	101.0	V	150.0	37.0	-8.2	25.2	54
1279.750000	28.7	101.0	V	0.0	36.3	-7.6	25.3	54
1711.000000	29.6	101.0	H	0.0	34.4	-4.8	24.4	54
1992.750000	32.2	101.0	V	3.0	35.5	-3.3	21.8	54
2398.250000	34.7	101.0	V	98.0	36.0	-1.3	19.3	54
2754.000000	35.9	101.0	H	0.0	35.0	0.9	18.1	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

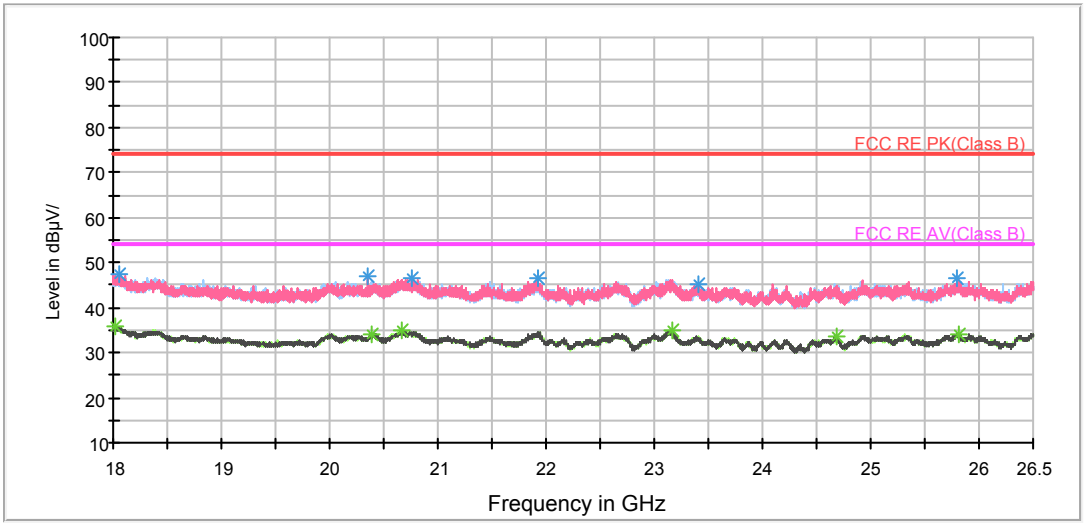
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3281.250000	51.4	200.0	H	156.0	53.5	-2.1	22.6	74
4916.250000	54.2	100.0	H	352.0	52.3	1.9	19.8	74
7398.750000	66.2	200.0	H	138.0	59.4	6.8	7.8	74
9843.750000	56.0	200.0	H	138.0	45.8	10.2	18.0	74
12639.375000	52.5	200.0	V	312.0	38.0	14.5	21.5	74
17990.625000	63.2	200.0	H	0.0	38.0	25.2	10.8	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3281.250000	46.0	200.0	H	156.0	48.1	-2.1	8.0	54
4923.750000	42.6	200.0	H	324.0	40.7	1.9	11.4	54
7389.375000	51.8	200.0	H	138.0	44.9	6.9	2.2	54
9847.500000	44.1	200.0	H	138.0	33.8	10.3	9.9	54
12643.125000	40.4	200.0	H	0.0	26.0	14.4	13.6	54
18000.000000	51.2	100.0	V	64.0	25.7	25.5	2.8	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18063.750000	47.6	V	38.0	49.7	-2.1	26.4	74
20359.812500	47.0	V	0.0	53.0	-6.0	27.0	74
20758.250000	46.3	V	218.0	53.1	-6.8	27.7	74
21924.875000	46.5	V	0.0	54.5	-8.0	27.5	74
23398.562500	45.4	V	90.0	51.3	-5.9	28.6	74
25798.750000	46.7	H	0.0	52.2	-5.5	27.3	74

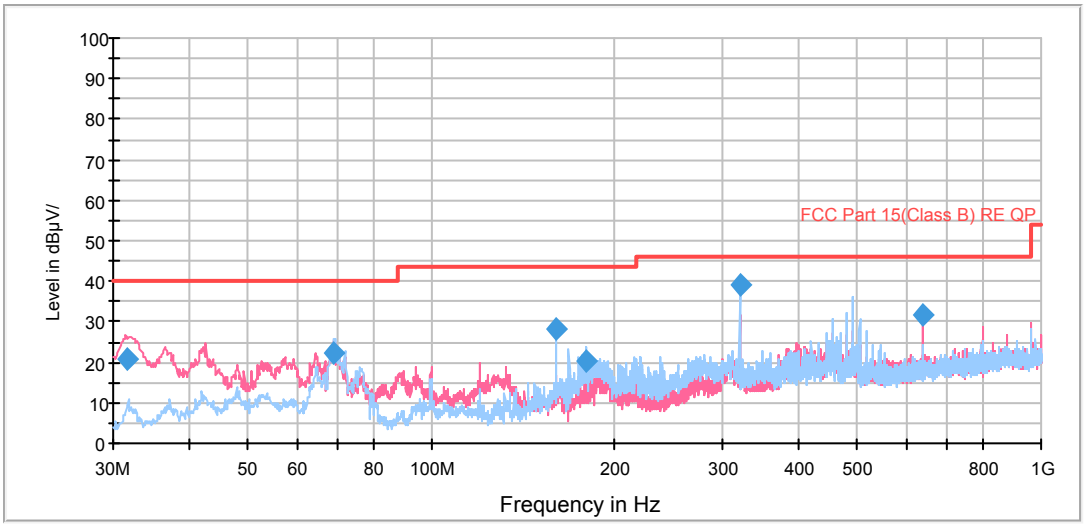
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18011.687500	35.7	V	186.0	37.5	-1.8	18.3	54
20394.875000	34.0	H	191.0	40.1	-6.1	20.0	54
20670.062500	34.8	V	228.0	41.4	-6.6	19.2	54
23163.750000	34.7	V	27.0	40.8	-6.1	19.3	54
24687.375000	33.6	V	175.0	39.6	-6.0	20.4	54
25817.875000	34.0	V	3.0	39.5	-5.5	20.0	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT40) CH3

RE 30M-1GHz QP



Radiates Emission from 30MHz to 1GHz

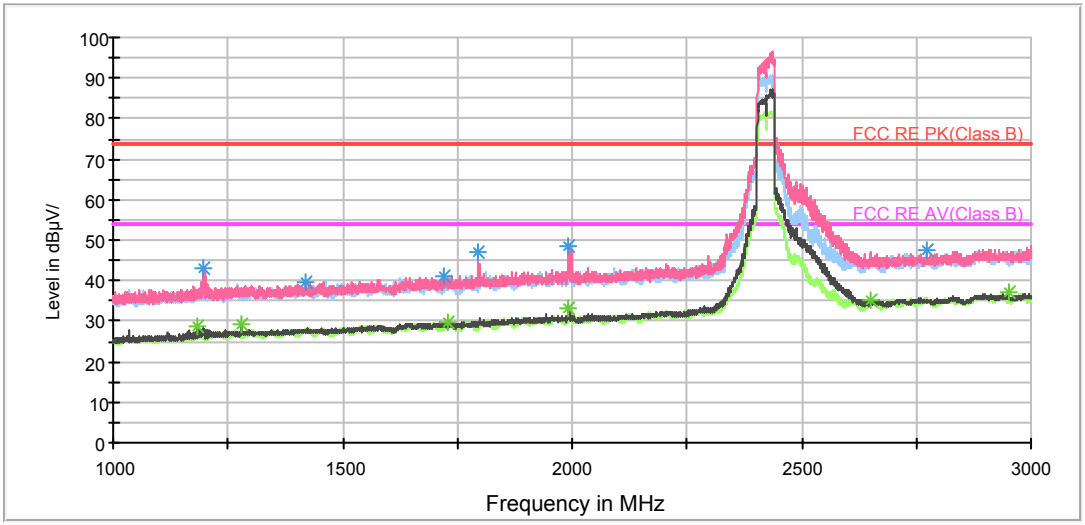
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
31.533638	21.0	121.0	V	56.0	43.5	-22.5	19.0	40.0
69.109894	22.1	101.0	H	190.0	48.3	-26.2	17.9	40.0
159.980050	28.2	126.0	H	35.0	56.9	-28.7	15.3	43.5
178.887762	20.1	121.0	H	72.0	48.4	-28.3	23.4	43.5
319.990000	39.0	101.0	H	266.0	62.3	-23.3	7.0	46.0
640.008750	31.6	101.0	V	272.0	48.0	-16.4	14.4	46.0

Remark: 1. Quasi-Peak = Reading value + Correction factor

2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

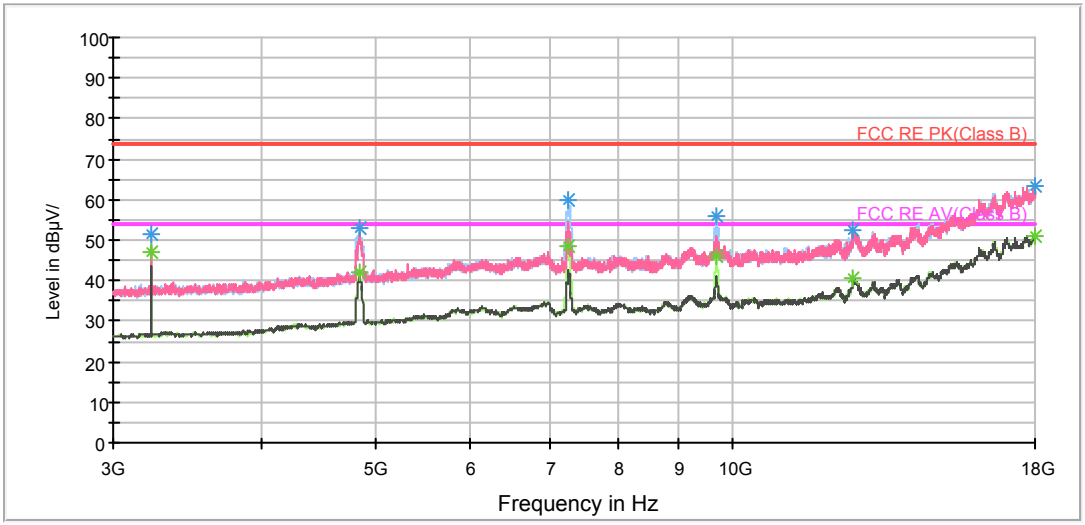
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1196.250000	43.1	101.0	V	0.0	51.3	-8.2	30.9	74
1419.250000	39.6	101.0	H	158.0	46.5	-6.9	34.4	74
1719.500000	41.0	101.0	V	118.0	45.9	-4.9	33.0	74
1795.000000	46.9	101.0	V	84.0	51.2	-4.3	27.1	74
1991.750000	48.7	101.0	V	162.0	52.0	-3.3	25.3	74
2774.250000	47.5	101.0	H	40.0	46.7	0.8	26.5	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1185.000000	28.6	101.0	V	153.0	36.7	-8.1	25.4	54
1280.000000	29.2	101.0	V	0.0	36.8	-7.6	24.8	54
1731.250000	29.7	101.0	H	0.0	34.6	-4.9	24.3	54
1993.250000	33.1	101.0	V	0.0	36.4	-3.3	20.9	54
2648.750000	35.1	101.0	H	0.0	34.7	0.4	18.9	54
2950.000000	37.0	101.0	V	196.0	35.0	2.0	17.0	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

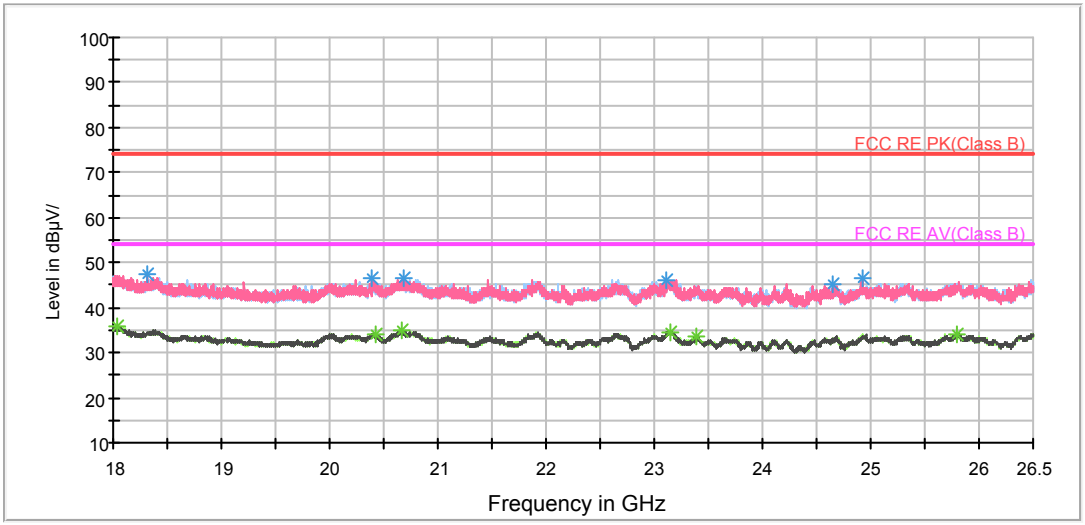
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3228.750000	51.6	200.0	H	185.0	54.3	-2.7	22.4	74
4845.000000	52.8	200.0	H	0.0	51.2	1.6	21.2	74
7263.750000	59.9	200.0	H	0.0	52.9	7.0	14.1	74
9691.875000	56.2	200.0	H	149.0	46.7	9.5	17.8	74
12639.375000	52.5	200.0	V	184.0	38.0	14.5	21.5	74
17990.625000	63.1	200.0	V	278.0	37.9	25.2	10.9	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3228.750000	47.2	200.0	H	185.0	49.9	-2.7	6.8	54
4843.125000	42.3	200.0	H	0.0	40.7	1.6	11.7	54
7269.375000	48.4	200.0	H	167.0	41.4	7.0	5.6	54
9688.125000	45.9	200.0	H	149.0	36.4	9.5	8.1	54
12641.250000	40.6	200.0	H	185.0	26.1	14.5	13.4	54
18000.000000	51.1	200.0	V	92.0	25.6	25.5	2.9	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18317.687500	47.4	V	160.0	50.5	-3.1	26.6	74
20392.750000	46.5	V	128.0	52.6	-6.1	27.5	74
20691.312500	46.6	H	0.0	53.3	-6.7	27.4	74
23105.312500	46.3	H	252.0	52.4	-6.1	27.7	74
24639.562500	45.3	H	357.0	51.3	-6.0	28.7	74
24922.187500	46.3	V	202.0	52.2	-5.9	27.7	74

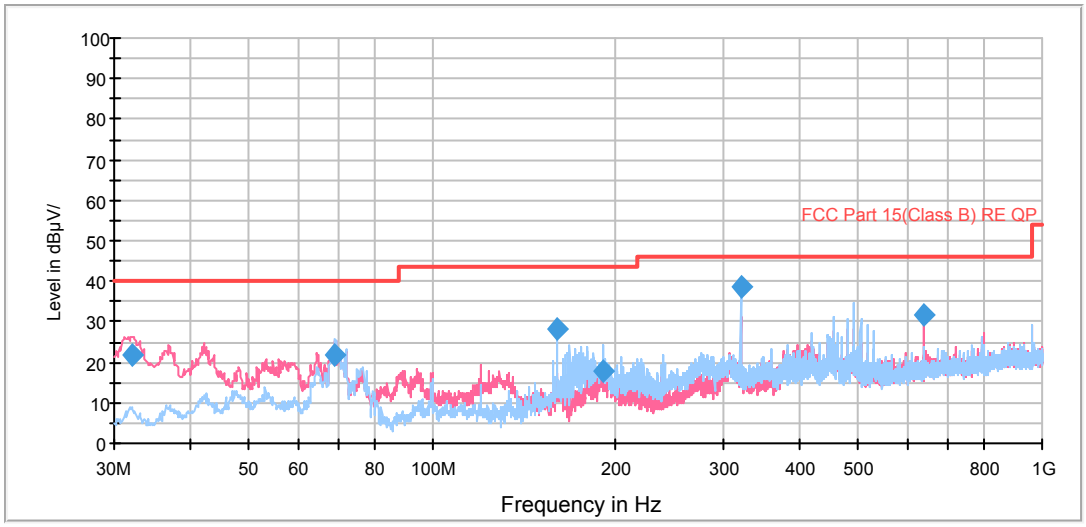
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18042.500000	35.8	H	336.0	37.8	-2.0	18.2	54
20419.312500	34.1	H	56.0	40.2	-6.1	19.9	54
20663.687500	34.8	H	357.0	41.4	-6.6	19.2	54
23153.125000	34.7	H	0.0	40.8	-6.1	19.3	54
23380.500000	33.6	V	21.0	39.5	-5.9	20.4	54
25795.562500	34.2	V	224.0	39.7	-5.5	19.8	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT40) CH6

RE 30M-1GHz QP



Radiates Emission from 30MHz to 1GHz

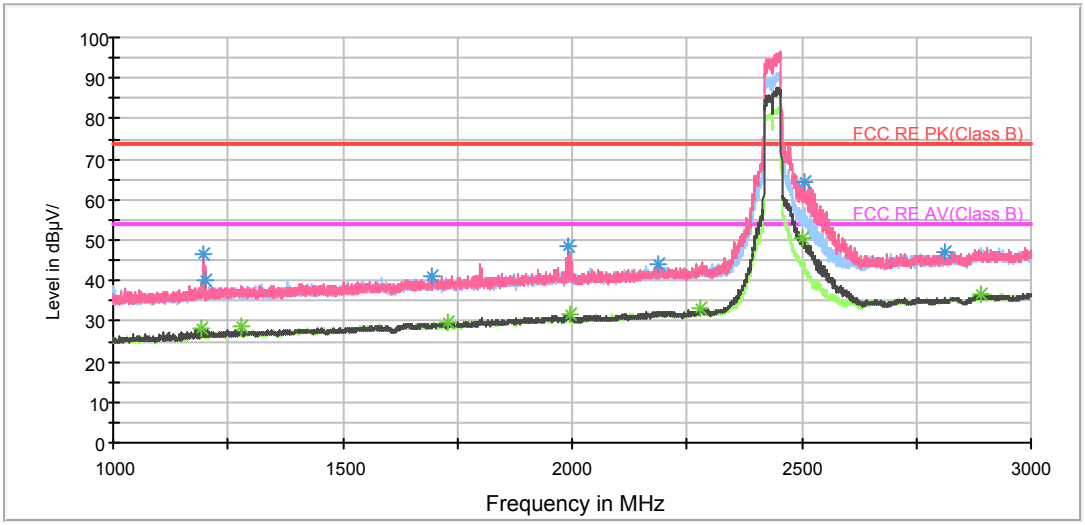
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
32.021097	21.7	124.0	V	62.0	44.2	-22.5	18.3	40.0
69.069894	21.8	101.0	H	197.0	47.9	-26.1	18.2	40.0
159.980050	28.2	126.0	H	35.0	56.9	-28.7	15.3	43.5
189.932981	18.0	126.0	H	70.0	45.2	-27.2	25.5	43.5
319.990000	38.7	101.0	H	267.0	62.0	-23.3	7.3	46.0
640.008750	31.5	102.0	V	272.0	47.9	-16.4	14.5	46.0

Remark: 1. Quasi-Peak = Reading value + Correction factor

2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

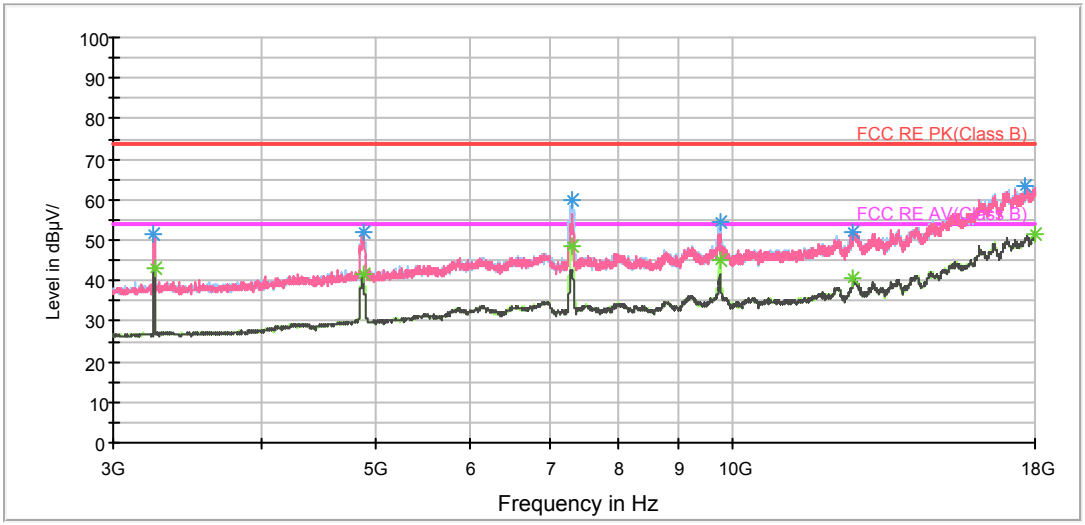
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1196.250000	46.3	101.0	V	152.0	54.5	-8.2	27.7	74
1695.750000	41.3	101.0	H	0.0	46.3	-5.0	32.7	74
1991.250000	48.5	101.0	V	0.0	51.8	-3.3	25.5	74
2188.500000	44.0	101.0	V	69.0	46.2	-2.2	30.0	74
2504.500000	64.4	101.0	V	26.0	64.6	-0.2	9.6	74
2812.250000	47.3	101.0	V	34.0	45.9	1.4	26.7	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1192.750000	28.3	101.0	V	152.0	36.5	-8.2	25.7	54
1731.000000	29.7	101.0	H	263.0	34.6	-4.9	24.3	54
1995.000000	31.9	101.0	V	169.0	35.1	-3.2	22.1	54
2279.750000	33.1	101.0	H	168.0	34.4	-1.3	20.9	54
2502.500000	50.7	101.0	V	18.0	50.9	-0.2	3.3	54
2890.750000	36.5	101.0	V	18.0	34.3	2.2	17.5	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

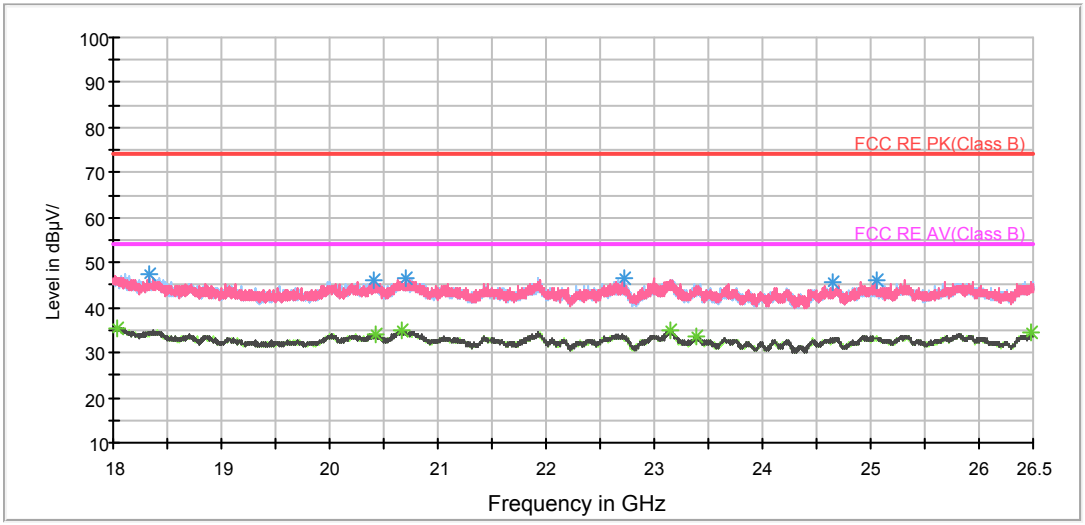
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3247.500000	51.7	200.0	H	156.0	54.2	-2.5	22.3	74
4873.125000	52.2	200.0	H	0.0	50.4	1.8	21.8	74
7331.250000	59.7	200.0	H	138.0	52.7	7.0	14.3	74
9748.125000	54.6	200.0	H	28.0	44.8	9.8	19.4	74
12648.750000	52.1	100.0	H	113.0	37.9	14.2	21.9	74
17686.875000	63.3	200.0	H	304.0	38.7	24.6	10.7	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3249.375000	43.2	200.0	H	156.0	45.7	-2.5	10.8	54
4873.125000	41.7	200.0	H	0.0	39.9	1.8	12.3	54
7316.250000	48.6	200.0	H	138.0	41.6	7.0	5.4	54
9748.125000	45.3	200.0	H	28.0	35.5	9.8	8.7	54
12639.375000	40.7	100.0	V	0.0	26.2	14.5	13.3	54
18000.000000	51.2	100.0	V	0.0	25.7	25.5	2.8	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18329.375000	47.6	V	116.0	50.8	-3.2	26.4	74
20415.062500	46.2	H	150.0	52.3	-6.1	27.8	74
20695.562500	46.7	V	95.0	53.4	-6.7	27.3	74
22715.375000	46.6	H	0.0	53.2	-6.6	27.4	74
24640.625000	45.5	H	235.0	51.5	-6.0	28.5	74
25060.312500	46.2	H	171.0	52.1	-5.9	27.8	74

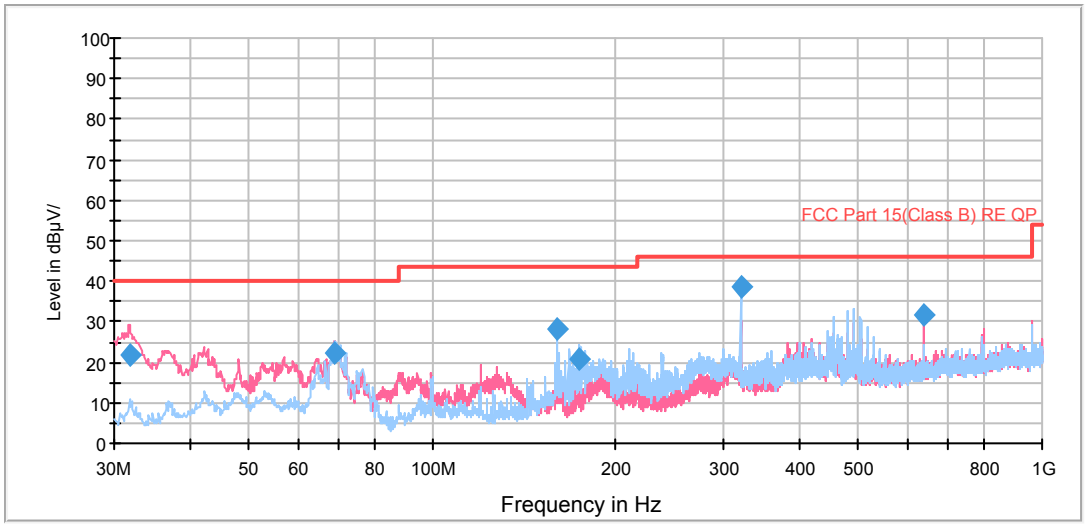
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18037.187500	35.6	H	319.0	37.6	-2.0	18.4	54
20417.187500	34.1	H	48.0	40.2	-6.1	19.9	54
20671.125000	34.8	H	0.0	41.4	-6.6	19.2	54
23157.375000	34.9	V	162.0	41.0	-6.1	19.1	54
23396.437500	33.6	H	0.0	39.5	-5.9	20.4	54
26476.625000	34.3	H	256.0	39.7	-5.4	19.7	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT40) CH9

RE 30M-1GHz QP



Radiates Emission from 30MHz to 1GHz

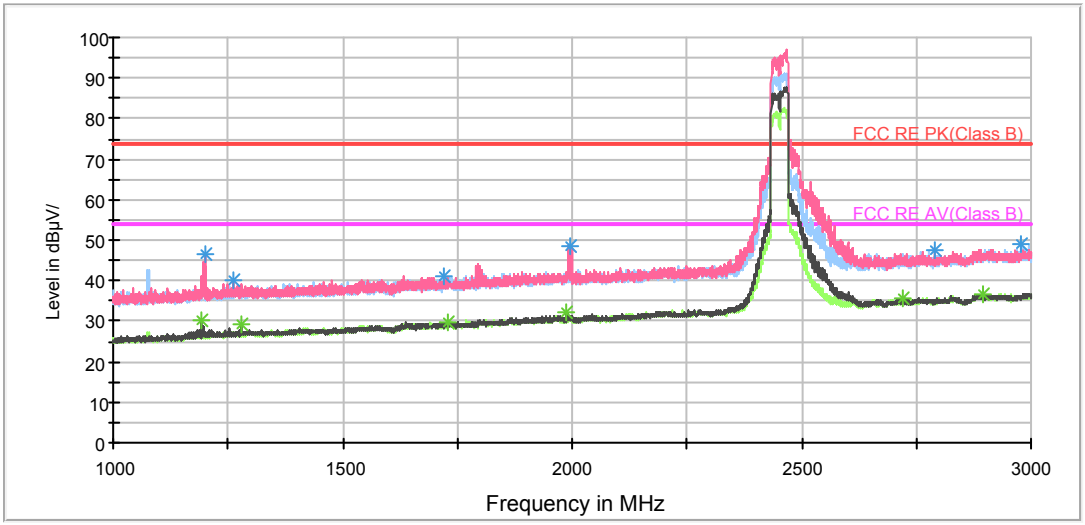
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
31.819203	21.8	121.0	V	55.0	44.3	-22.5	18.2	40.0
69.110840	22.1	102.0	H	188.0	48.3	-26.2	17.9	40.0
159.980050	28.3	125.0	H	35.0	57.0	-28.7	15.2	43.5
173.765153	20.6	125.0	H	72.0	49.2	-28.6	22.9	43.5
319.990000	38.7	101.0	H	273.0	62.0	-23.3	7.3	46.0
640.008750	31.7	100.0	V	272.0	48.1	-16.4	14.3	46.0

Remark: 1. Quasi-Peak = Reading value + Correction factor

2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

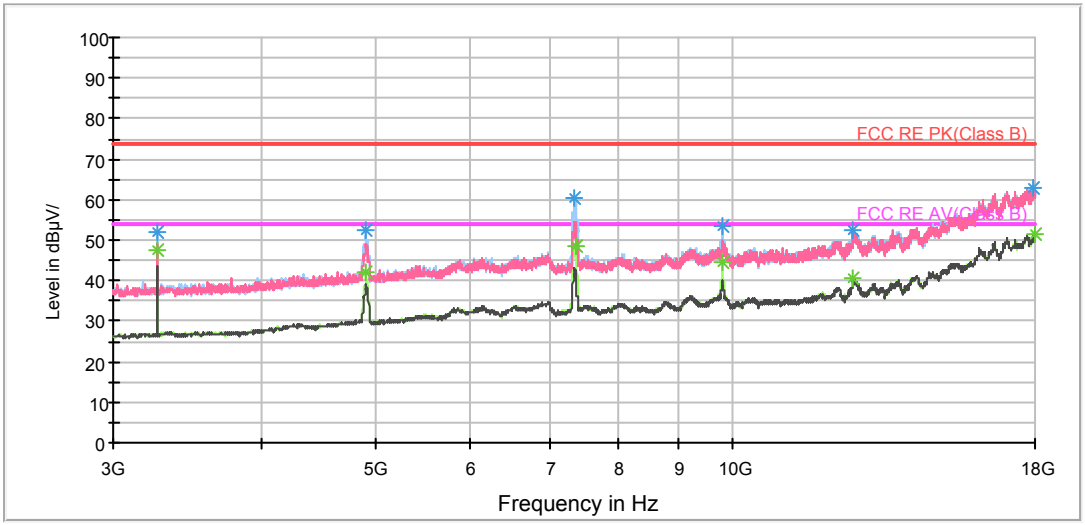
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1199.250000	46.4	101.0	V	115.0	54.6	-8.2	27.6	74
1263.500000	40.1	101.0	V	0.0	47.8	-7.7	33.9	74
1718.500000	40.9	101.0	H	307.0	45.8	-4.9	33.1	74
1994.000000	48.7	101.0	V	0.0	51.9	-3.2	25.3	74
2788.750000	47.4	101.0	V	0.0	46.4	1.0	26.6	74
2977.000000	49.1	101.0	H	351.0	46.9	2.2	24.9	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1192.000000	30.4	101.0	V	158.0	38.6	-8.2	23.6	54
1280.000000	29.1	101.0	V	0.0	36.7	-7.6	24.9	54
1731.250000	29.6	101.0	H	177.0	34.5	-4.9	24.4	54
1986.000000	32.1	101.0	V	167.0	35.8	-3.7	21.9	54
2722.000000	35.7	101.0	V	2.0	35.4	0.3	18.3	54
2896.000000	36.7	101.0	H	80.0	34.6	2.1	17.3	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

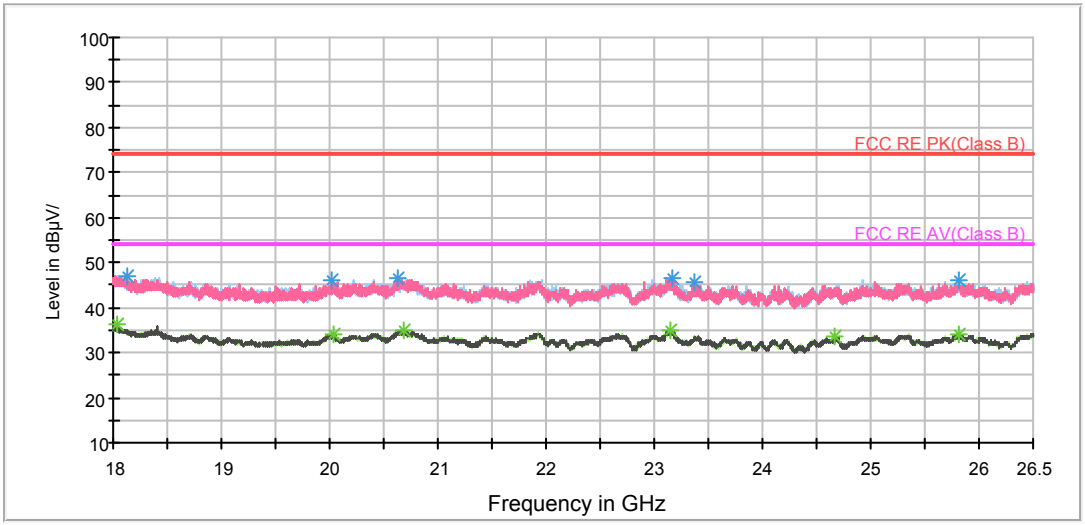
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3268.125000	52.0	200.0	H	185.0	54.4	-2.4	22.0	74
4903.125000	52.4	200.0	H	0.0	50.5	1.9	21.6	74
7353.750000	60.4	200.0	H	167.0	53.4	7.0	13.6	74
9808.125000	53.4	200.0	H	148.0	43.5	9.9	20.6	74
12639.375000	52.5	200.0	V	0.0	38.0	14.5	21.5	74
17898.750000	62.7	200.0	H	129.0	37.6	25.1	11.3	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3268.125000	47.4	200.0	H	185.0	49.8	-2.4	6.6	54
4903.125000	42.0	200.0	H	0.0	40.1	1.9	12.0	54
7365.000000	48.4	200.0	H	167.0	41.4	7.0	5.6	54
9808.125000	44.7	200.0	H	148.0	34.8	9.9	9.3	54
12641.250000	40.5	200.0	V	44.0	26.0	14.5	13.5	54
17996.250000	51.4	200.0	H	0.0	26.0	25.4	2.6	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18134.937500	47.1	V	0.0	49.5	-2.4	26.9	74
20020.875000	46.1	V	0.0	51.8	-5.7	27.9	74
20621.187500	46.5	V	122.0	53.0	-6.5	27.5	74
23158.437500	46.7	V	261.0	52.8	-6.1	27.3	74
23372.000000	45.4	V	111.0	51.3	-5.9	28.6	74
25816.812500	46.1	H	316.0	51.6	-5.5	27.9	74

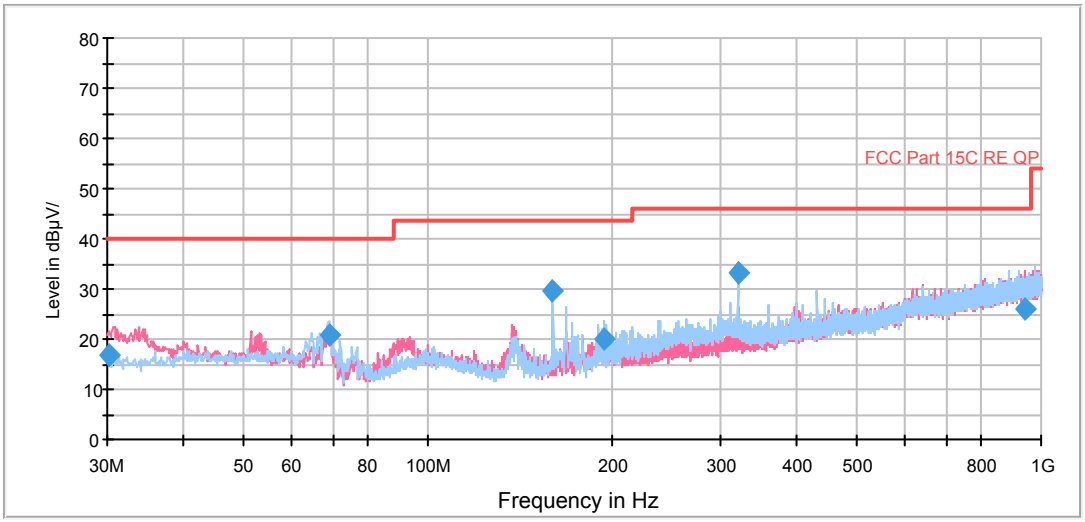
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18042.500000	36.4	H	305.0	38.4	-2.0	17.6	54
20043.187500	34.0	H	0.0	39.7	-5.7	20.0	54
20691.312500	34.9	H	284.0	41.6	-6.7	19.1	54
23157.375000	34.8	V	218.0	40.9	-6.1	19.2	54
24670.375000	33.7	V	218.0	39.7	-6.0	20.3	54
25810.437500	34.1	V	58.0	39.6	-5.5	19.9	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

BLE-Channel 0

FCC RE 0.03-1GHz QP Class B



Radiates Emission from 30MHz to 1GHz

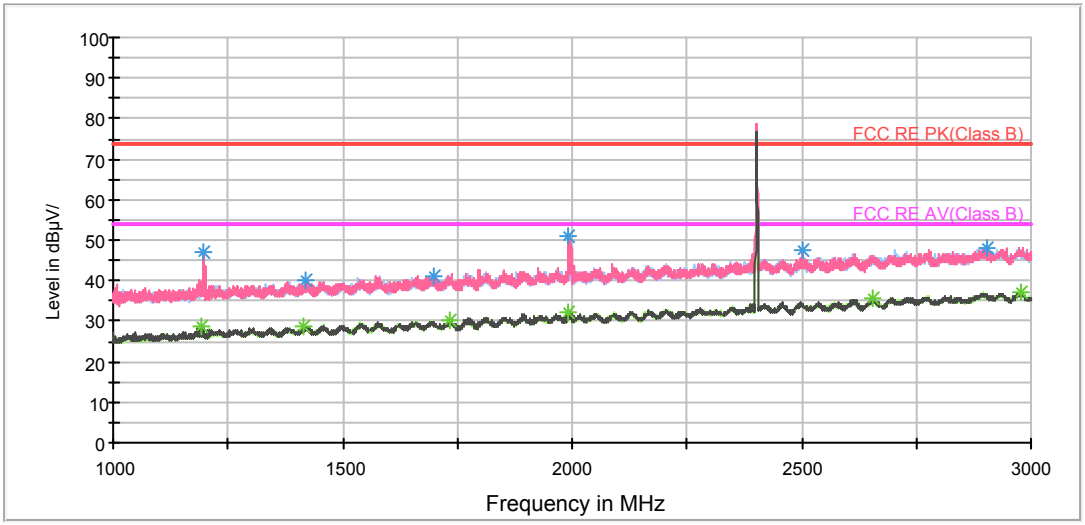
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.207500	16.7	125.0	V	277.0	28.8	-12.1	23.3	40.0
68.921250	20.7	125.0	H	186.0	29.7	-9.0	19.3	40.0
159.980000	29.6	125.0	H	55.0	39.4	-9.8	13.9	43.5
194.333750	20.1	125.0	H	286.0	31.8	-11.7	23.4	43.5
319.990000	33.4	100.0	H	99.0	49.7	-16.3	12.6	46.0
940.990000	26.0	113.0	V	25.0	53.1	-27.1	20.0	46.0

Remark: 1. Quasi-Peak = Reading value + Correction factor

2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

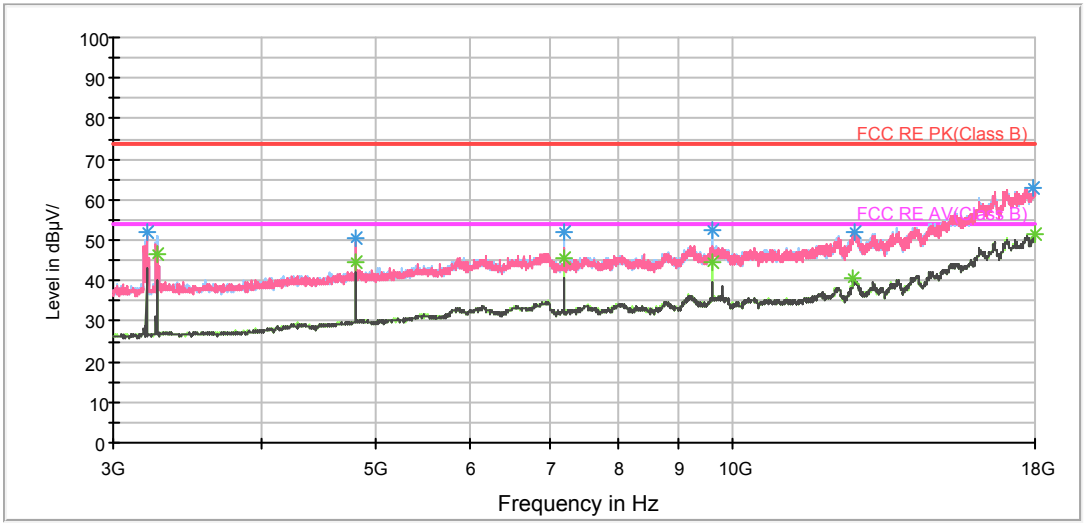
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1195.000000	47.0	200.0	V	145.0	55.2	-8.2	27.0	74
1417.500000	40.3	99.0	V	0.0	47.2	-6.9	33.7	74
1697.000000	41.2	200.0	H	88.0	46.2	-5.0	32.8	74
1992.750000	51.0	200.0	V	163.0	54.3	-3.3	23.0	74
2500.500000	47.4	99.0	V	192.0	47.6	-0.2	26.6	74
2904.250000	48.2	99.0	V	86.0	46.2	2.0	25.8	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1193.000000	28.9	200.0	V	145.0	37.1	-8.2	25.1	54
1415.500000	28.6	200.0	V	0.0	35.6	-7.0	25.4	54
1731.750000	30.0	99.0	V	123.0	34.8	-4.8	24.0	54
1993.250000	32.2	200.0	V	172.0	35.5	-3.3	21.8	54
2653.750000	35.6	200.0	V	0.0	35.2	0.4	18.4	54
2977.000000	37.2	101.0	H	194.0	35.0	2.2	16.8	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

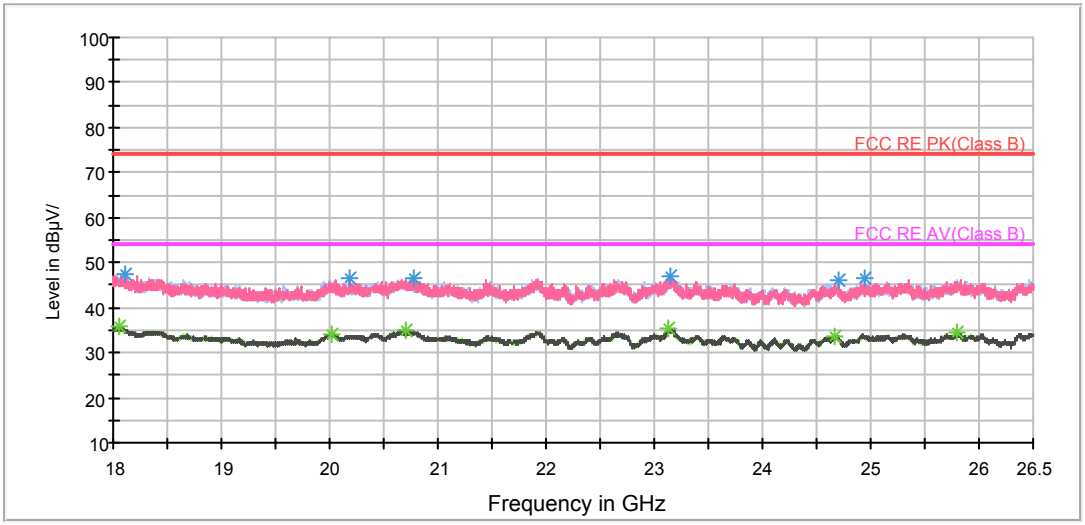
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3202.500000	51.8	200.0	H	28.0	54.6	-2.8	22.2	74
4803.750000	50.6	100.0	H	357.0	49.3	1.3	23.4	74
7203.750000	51.7	200.0	H	138.0	45.3	6.4	22.3	74
9607.500000	52.6	200.0	H	138.0	42.8	9.8	21.4	74
12658.125000	52.2	200.0	V	240.0	38.3	13.9	21.8	74
17923.125000	62.9	200.0	V	203.0	37.2	25.7	11.1	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3268.125000	46.3	200.0	H	28.0	48.7	-2.4	7.7	54
4803.750000	44.4	100.0	H	357.0	43.1	1.3	9.6	54
7205.625000	45.6	200.0	H	138.0	39.2	6.4	8.4	54
9607.500000	44.7	200.0	H	138.0	34.9	9.8	9.3	54
12637.500000	40.6	200.0	V	0.0	26.3	14.3	13.4	54
18000.000000	51.4	200.0	H	193.0	25.9	25.5	2.6	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18111.562500	47.3	V	45.0	49.6	-2.3	26.7	74
20179.187500	46.4	V	55.0	52.2	-5.8	27.6	74
20785.875000	46.5	V	88.0	53.4	-6.9	27.5	74
23142.500000	46.8	H	284.0	52.9	-6.1	27.2	74
24694.812500	46.0	H	177.0	52.0	-6.0	28.0	74
24948.750000	46.4	H	0.0	52.3	-5.9	27.6	74

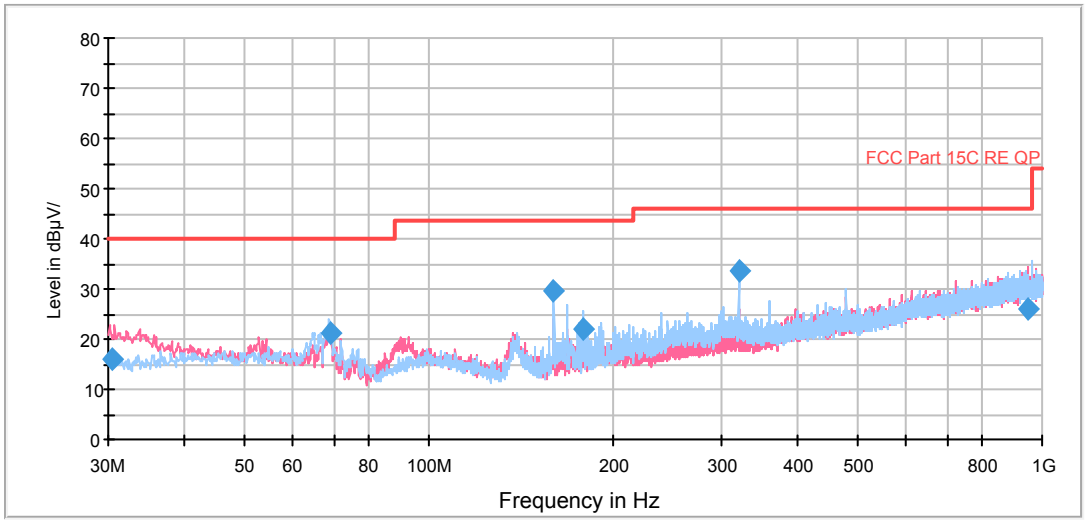
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18063.750000	35.6	V	0.0	37.7	-2.1	18.4	54
20018.750000	34.2	H	315.0	39.9	-5.7	19.8	54
20708.312500	34.8	H	337.0	41.5	-6.7	19.2	54
23137.187500	35.2	H	284.0	41.3	-6.1	18.8	54
24668.250000	33.7	V	13.0	39.7	-6.0	20.3	54
25801.937500	34.4	H	326.0	39.9	-5.5	19.6	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

BLE-Channel 19

FCC RE 0.03-1GHz QP Class B



Radiates Emission from 30MHz to 1GHz

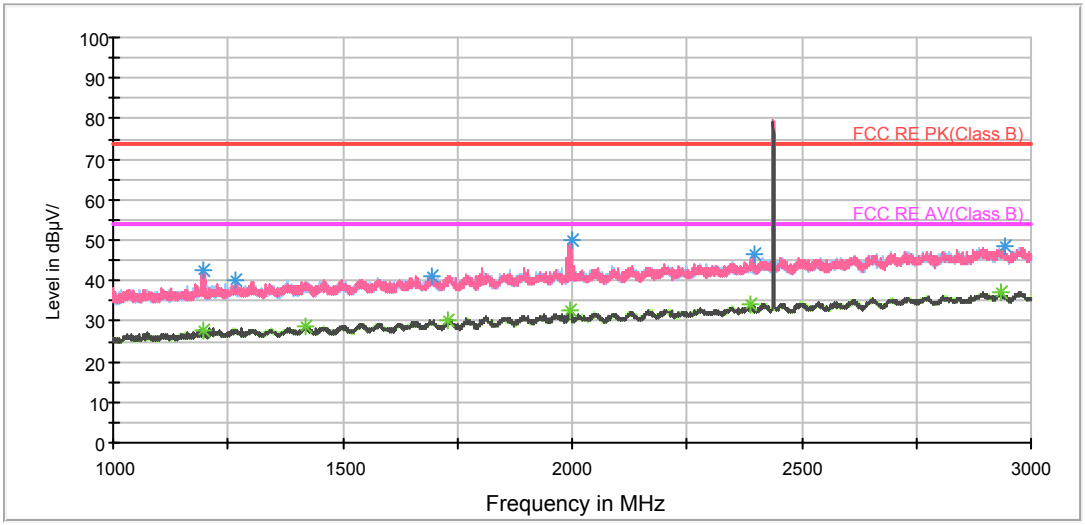
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.520000	16.0	100.0	V	341.0	28.1	-12.1	24.0	40.0
68.960000	21.0	125.0	H	352.0	30.0	-9.0	19.0	40.0
159.980000	29.5	125.0	H	62.0	39.3	-9.8	14.0	43.5
178.895000	22.1	125.0	H	277.0	32.9	-10.8	21.4	43.5
319.990000	33.4	100.0	H	100.0	49.7	-16.3	12.6	46.0
951.221250	26.2	100.0	V	348.0	53.4	-27.2	19.8	46.0

Remark: 1. Quasi-Peak = Reading value + Correction factor

2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

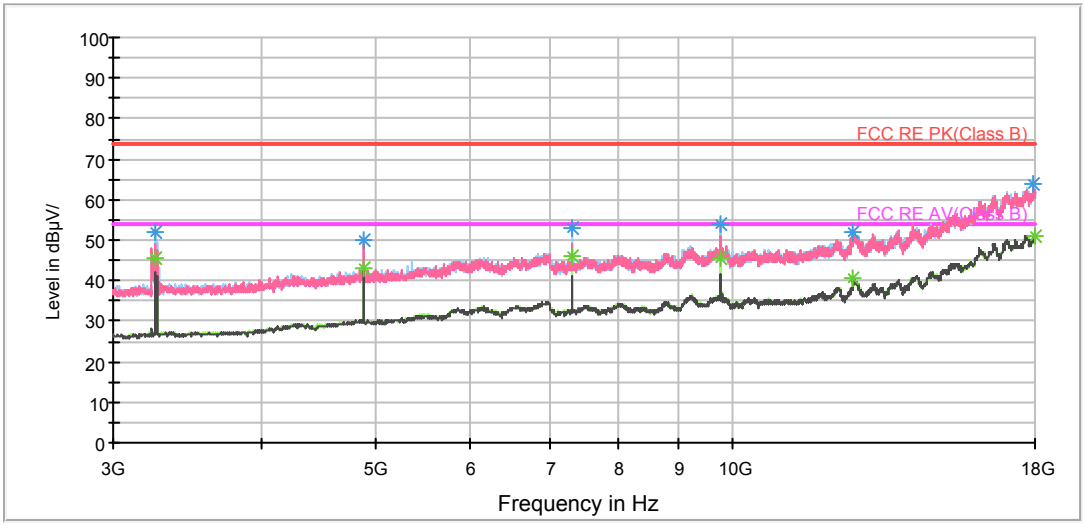
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1198.500000	42.7	200.0	V	187.0	50.9	-8.2	31.3	74
1267.000000	40.1	200.0	H	0.0	47.8	-7.7	33.9	74
1694.500000	41.3	101.0	V	86.0	46.3	-5.0	32.7	74
1998.500000	49.9	200.0	V	146.0	53.3	-3.4	24.1	74
2398.500000	46.6	101.0	V	32.0	47.9	-1.3	27.4	74
2943.000000	48.6	200.0	H	69.0	46.7	1.9	25.4	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1194.750000	27.9	101.0	H	232.0	36.1	-8.2	26.1	54
1419.250000	28.9	200.0	H	125.0	35.8	-6.9	25.1	54
1731.000000	30.2	200.0	H	49.0	35.1	-4.9	23.8	54
1995.750000	32.4	200.0	V	146.0	35.7	-3.3	21.6	54
2390.750000	34.0	101.0	V	130.0	35.4	-1.4	20.0	54
2935.500000	37.1	200.0	H	89.0	35.3	1.8	16.9	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

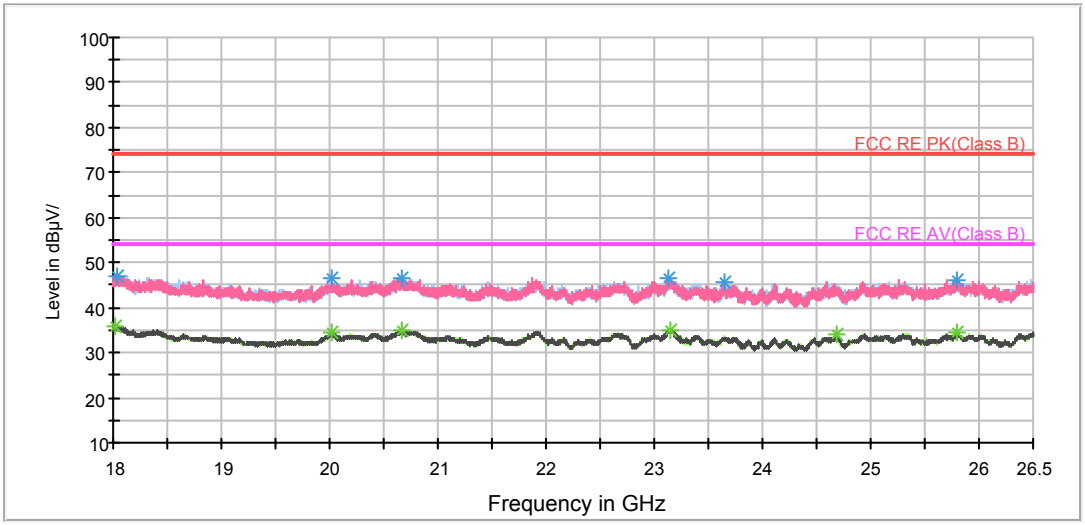
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3253.125000	52.2	200.0	H	186.0	54.7	-2.5	21.8	74
4878.750000	50.2	200.0	H	0.0	48.4	1.8	23.8	74
7320.000000	52.9	200.0	H	0.0	46.0	6.9	21.1	74
9759.375000	53.7	200.0	H	149.0	44.1	9.6	20.3	74
12646.875000	51.8	200.0	H	204.0	37.5	14.3	22.2	74
17910.000000	64.0	200.0	V	28.0	38.5	25.5	10.0	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3253.125000	45.7	200.0	H	186.0	48.2	-2.5	8.3	54
4878.750000	43.2	200.0	H	0.0	41.4	1.8	10.8	54
7320.000000	45.8	200.0	H	0.0	38.9	6.9	8.2	54
9759.375000	45.5	200.0	H	149.0	35.9	9.6	8.5	54
12643.125000	40.5	200.0	V	46.0	26.1	14.4	13.5	54
18000.000000	51.2	200.0	H	0.0	25.7	25.5	2.8	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18036.125000	47.2	H	199.0	49.2	-2.0	26.8	74
20026.187500	46.7	H	221.0	52.4	-5.7	27.3	74
20671.125000	46.5	V	0.0	53.1	-6.6	27.5	74
23135.062500	46.6	H	296.0	52.7	-6.1	27.4	74
23639.750000	45.6	V	0.0	51.5	-5.9	28.4	74
25788.125000	46.2	V	217.0	51.7	-5.5	27.8	74

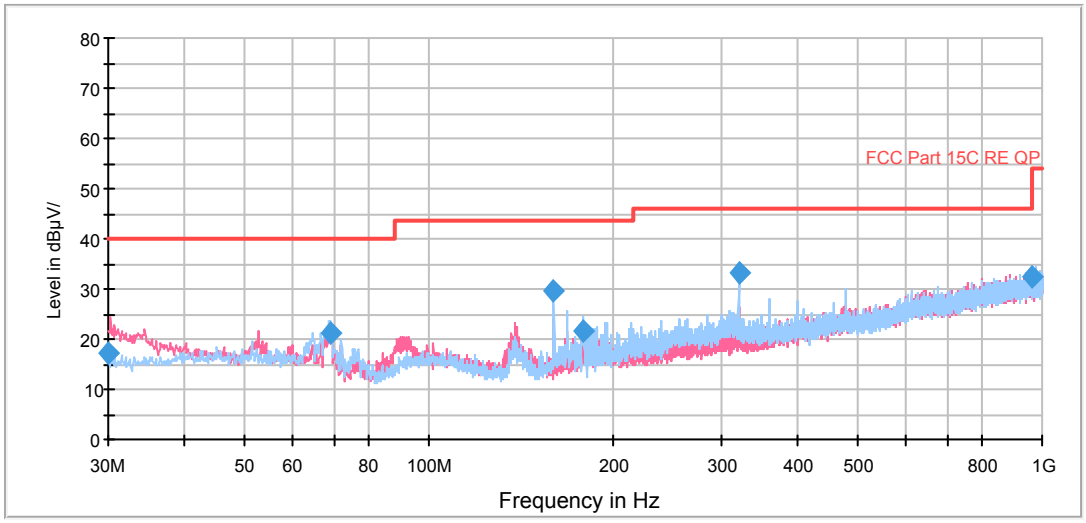
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18024.437500	35.7	V	18.0	37.6	-1.9	18.3	54
20026.187500	34.3	V	91.0	40.0	-5.7	19.7	54
20662.625000	34.9	H	210.0	41.5	-6.6	19.1	54
23151.000000	35.0	V	0.0	41.1	-6.1	19.0	54
24677.812500	33.9	V	59.0	39.9	-6.0	20.1	54
25801.937500	34.4	H	359.0	39.9	-5.5	19.6	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

BLE-Channel 39

FCC RE 0.03-1GHz QP Class B



Radiates Emission from 30MHz to 1GHz

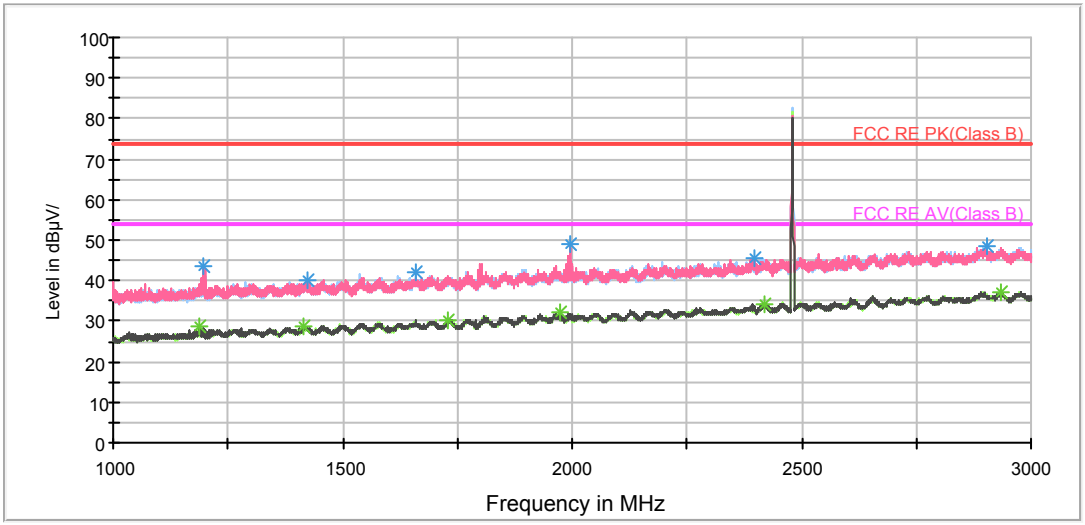
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.000000	17.0	125.0	V	261.0	29.1	-12.1	23.0	40.0
68.960000	21.0	125.0	H	176.0	30.0	-9.0	19.0	40.0
159.980000	29.6	125.0	H	51.0	39.4	-9.8	13.9	43.5
178.895000	21.8	125.0	H	282.0	32.6	-10.8	21.7	43.5
319.990000	33.4	100.0	H	102.0	49.7	-16.3	12.6	46.0
959.987500	32.5	100.0	V	66.0	59.9	-27.4	13.5	46.0

Remark: 1. Quasi-Peak = Reading value + Correction factor

2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

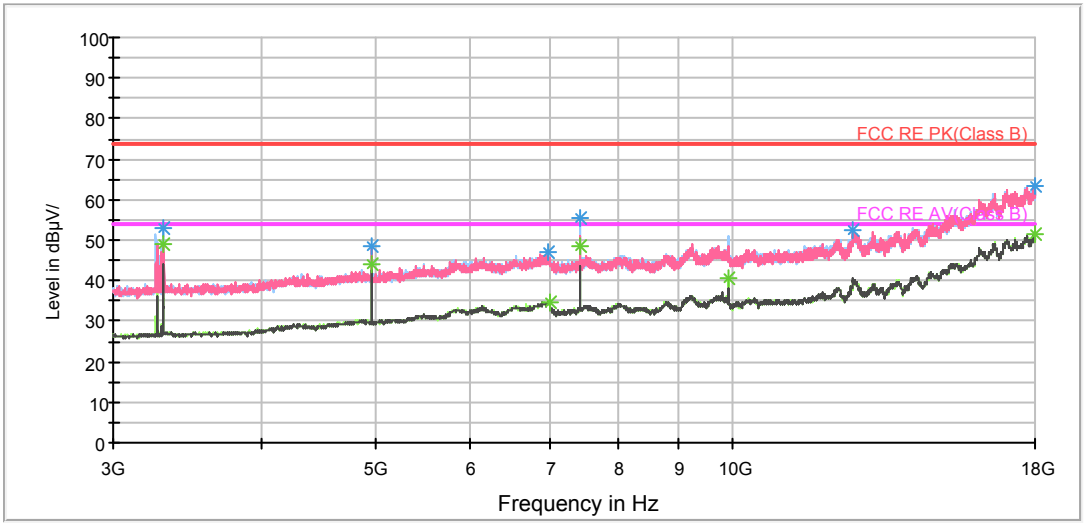
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1198.250000	43.7	100.0	V	96.0	51.9	-8.2	30.3	74
1425.250000	39.9	100.0	V	86.0	46.8	-6.9	34.1	74
1659.250000	41.8	200.0	H	48.0	47.0	-5.2	32.2	74
1995.750000	49.2	200.0	V	148.0	52.5	-3.3	24.8	74
2398.750000	45.5	100.0	V	105.0	46.8	-1.3	28.5	74
2904.500000	48.4	101.0	H	0.0	46.4	2.0	25.6	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1188.500000	28.6	200.0	V	110.0	36.8	-8.2	25.4	54
1416.500000	28.5	100.0	V	1.0	35.5	-7.0	25.5	54
1731.250000	30.1	200.0	V	91.0	35.0	-4.9	23.9	54
1972.000000	32.0	200.0	V	148.0	35.6	-3.6	22.0	54
2420.000000	34.2	101.0	H	71.0	34.8	-0.6	19.8	54
2932.500000	37.1	200.0	H	48.0	35.3	1.8	16.9	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

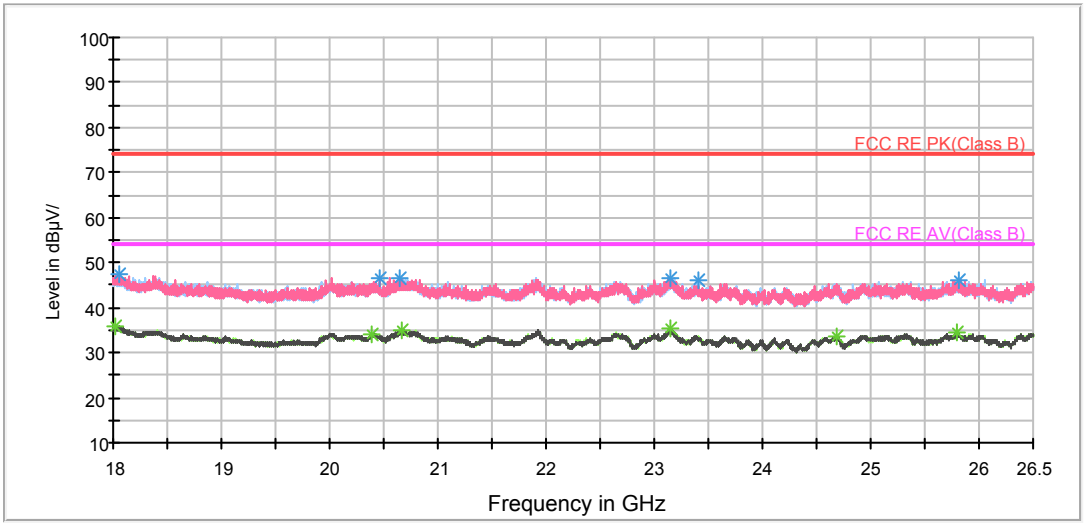
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3305.625000	52.8	200.0	H	186.0	54.9	-2.1	21.2	74
4959.375000	48.6	200.0	H	167.0	46.8	1.8	25.4	74
6993.750000	46.9	200.0	H	241.0	40.4	6.5	27.1	74
7440.000000	55.4	200.0	H	167.0	48.8	6.6	18.6	74
12641.250000	52.3	200.0	V	156.0	37.8	14.5	21.7	74
17994.375000	63.2	200.0	H	351.0	37.9	25.3	10.8	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3305.625000	48.9	200.0	H	186.0	51.0	-2.1	5.1	54
4959.375000	43.8	200.0	H	167.0	42.0	1.8	10.2	54
6999.375000	34.6	200.0	V	48.0	28.1	6.5	19.4	54
7440.000000	48.6	200.0	H	167.0	42.0	6.6	5.4	54
9920.625000	40.6	200.0	H	149.0	30.3	10.3	13.4	54
18000.000000	51.3	200.0	H	74.0	25.8	25.5	2.7	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18064.812500	47.2	H	229.0	49.3	-2.1	26.8	74
20467.125000	46.6	V	206.0	52.8	-6.2	27.4	74
20649.875000	46.7	V	111.0	53.3	-6.6	27.3	74
23146.750000	46.6	V	100.0	52.7	-6.1	27.4	74
23408.125000	46.2	H	282.0	52.1	-5.9	27.8	74
25809.375000	46.2	V	90.0	51.7	-5.5	27.8	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18023.375000	35.8	V	6.0	37.7	-1.9	18.2	54
20395.937500	34.2	V	38.0	40.3	-6.1	19.8	54
20664.750000	34.9	H	0.0	41.5	-6.6	19.1	54
23152.062500	35.6	H	0.0	41.7	-6.1	18.4	54
24693.750000	33.7	V	185.0	39.7	-6.0	20.3	54
25804.062500	34.4	V	163.0	39.9	-5.5	19.6	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

5.8. Conducted Emission

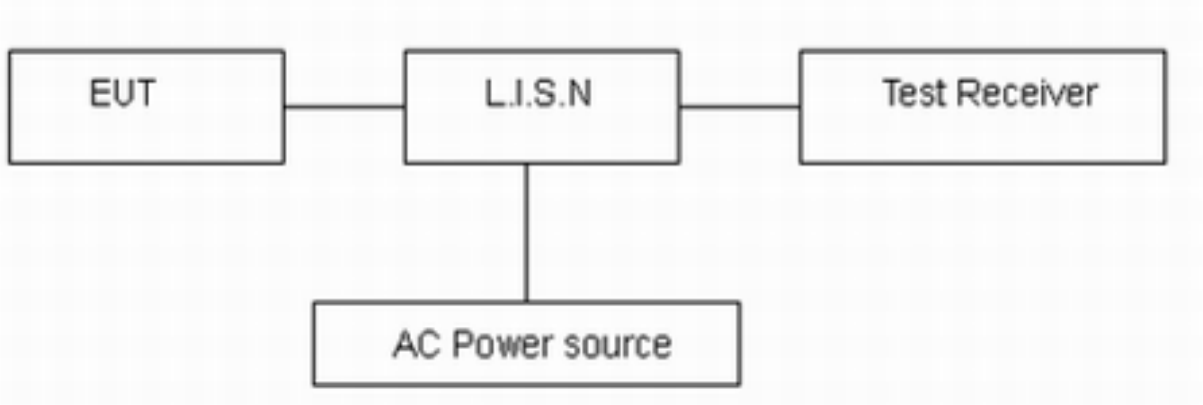
Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Methods of Measurement

The EUT is placed on a non-metallic table of 80cm height above the horizontal metal reference ground plane. During the test, the EUT was operating in its typical mode. The test method is according to ANSI C63.10-2013. Connect the AC power line of the EUT to the L.I.S.N. Use EMI receiver to detect the average and Quasi-peak value. RBW is set to 9 kHz, VBW is set to 30kHz. The measurement result should include both L line and N line.
The test is in transmitting mode.

Test Setup



Note: AC Power source is used to change the voltage 110V/60Hz.

Limits

Frequency (MHz)	Conducted Limits(dBμV)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56 *	56 to 46*
0.5 - 5	56	46
5 - 30	60	50
*: Decreases with the logarithm of the frequency.		

Measurement Uncertainty

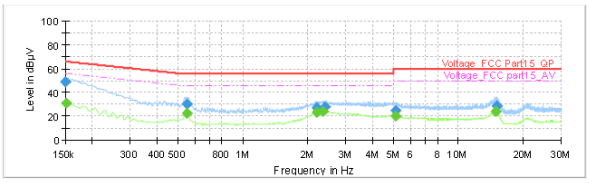
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 1.96, U= 2.69 dB.

Test Results:

Following plots, Blue trace uses the peak detection and Green trace uses the average detection.

802.11b, Channel No.: 1

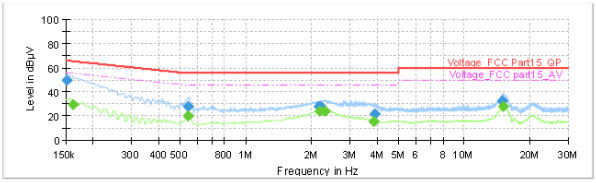
L Line



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.150000	48.48	---	66.00	17.52	1000.0	9.000	L1	ON	19.1
0.152250	---	31.26	55.88	24.62	1000.0	9.000	L1	ON	19.0
0.552750	---	22.45	46.00	23.55	1000.0	9.000	L1	ON	19.3
0.552750	30.49	---	56.00	25.51	1000.0	9.000	L1	ON	19.3
2.204250	27.08	---	56.00	28.92	1000.0	9.000	L1	ON	19.1
2.211000	---	23.31	46.00	22.69	1000.0	9.000	L1	ON	19.1
2.357250	---	24.17	46.00	21.83	1000.0	9.000	L1	ON	19.0
2.411250	27.71	---	56.00	28.29	1000.0	9.000	L1	ON	19.0
5.100000	24.96	---	60.00	35.04	1000.0	9.000	L1	ON	19.1
5.122500	---	20.08	50.00	29.92	1000.0	9.000	L1	ON	19.1
14.934750	---	23.73	50.00	26.27	1000.0	9.000	L1	ON	19.5
15.024750	28.87	---	60.00	31.13	1000.0	9.000	L1	ON	19.5

N Line

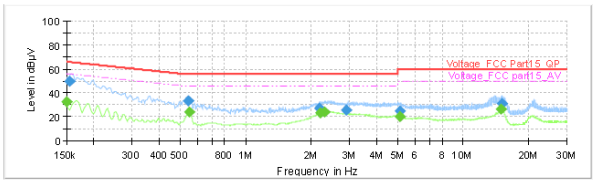


Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.152250	49.71	---	65.88	16.16	1000.0	9.000	N	ON	19.1
0.161250	---	29.55	55.40	25.85	1000.0	9.000	N	ON	19.1
0.546000	---	19.92	46.00	26.08	1000.0	9.000	N	ON	19.2
0.546000	28.15	---	56.00	27.85	1000.0	9.000	N	ON	19.2
2.148000	27.69	---	56.00	28.31	1000.0	9.000	N	ON	19.1
2.184000	---	24.22	46.00	21.78	1000.0	9.000	N	ON	19.1
2.204250	28.17	---	56.00	27.83	1000.0	9.000	N	ON	19.1
2.305500	---	24.18	46.00	21.82	1000.0	9.000	N	ON	19.0
3.849000	---	15.60	46.00	30.40	1000.0	9.000	N	ON	19.0
3.878250	21.62	---	56.00	34.38	1000.0	9.000	N	ON	19.0
14.923500	32.87	---	60.00	27.14	1000.0	9.000	N	ON	19.5
15.114750	---	27.58	50.00	22.42	1000.0	9.000	N	ON	19.5

802.11b, Channel No.: 6

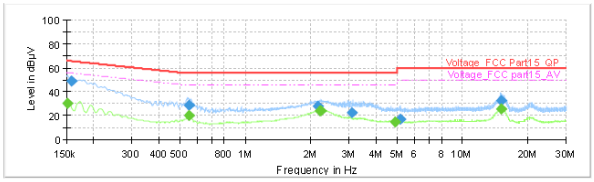
L Line



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.150000	---	32.59	56.00	23.41	1000.0	9.000	L1	ON	19.1
0.154500	49.55	---	65.75	16.21	1000.0	9.000	L1	ON	19.1
0.546000	33.05	---	56.00	22.95	1000.0	9.000	L1	ON	19.2
0.548250	---	23.80	46.00	22.20	1000.0	9.000	L1	ON	19.3
2.181750	26.98	---	56.00	29.02	1000.0	9.000	L1	ON	19.1
2.193000	---	23.01	46.00	22.99	1000.0	9.000	L1	ON	19.1
2.310000	---	24.20	46.00	21.80	1000.0	9.000	L1	ON	19.0
2.886000	25.82	---	56.00	30.18	1000.0	9.000	L1	ON	19.1
5.093250	---	20.00	50.00	30.00	1000.0	9.000	L1	ON	19.1
5.115750	25.06	---	60.00	34.94	1000.0	9.000	L1	ON	19.1
14.966250	---	26.01	50.00	23.99	1000.0	9.000	L1	ON	19.5
15.078750	30.64	---	60.00	29.36	1000.0	9.000	L1	ON	19.5

N Line

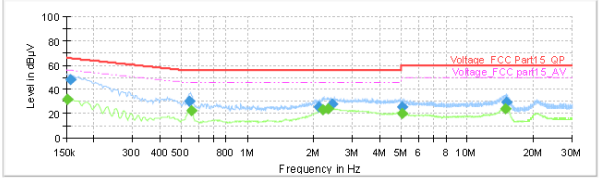


Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.152250	---	30.01	55.88	25.86	1000.0	9.000	N	ON	19.1
0.159000	48.47	---	65.52	17.05	1000.0	9.000	N	ON	19.1
0.548250	28.52	---	56.00	27.48	1000.0	9.000	N	ON	19.3
0.552750	---	19.80	46.00	26.20	1000.0	9.000	N	ON	19.3
2.163750	27.97	---	56.00	28.03	1000.0	9.000	N	ON	19.1
2.211000	---	23.77	46.00	22.23	1000.0	9.000	N	ON	19.1
2.226750	---	23.99	46.00	22.01	1000.0	9.000	N	ON	19.1
3.084000	22.14	---	56.00	33.86	1000.0	9.000	N	ON	19.1
4.906500	---	14.82	46.00	31.18	1000.0	9.000	N	ON	19.1
5.156250	16.84	---	60.00	43.16	1000.0	9.000	N	ON	19.1
15.009000	32.36	---	60.00	27.64	1000.0	9.000	N	ON	19.5
15.087750	---	25.86	50.00	24.14	1000.0	9.000	N	ON	19.5

802.11b, Channel No.: 11

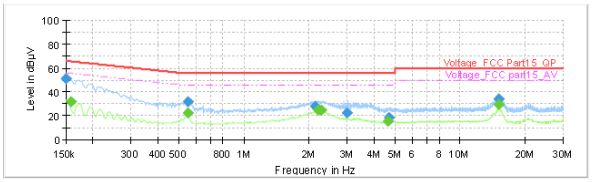
L Line



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.152250	---	31.40	55.88	24.47	1000.0	9.000	L1	ON	19.0
0.156750	48.11	---	65.63	17.53	1000.0	9.000	L1	ON	19.1
0.546000	30.07	---	56.00	25.93	1000.0	9.000	L1	ON	19.2
0.555000	---	22.49	46.00	23.51	1000.0	9.000	L1	ON	19.3
2.103000	25.41	---	56.00	30.59	1000.0	9.000	L1	ON	19.1
2.199750	---	23.07	46.00	22.93	1000.0	9.000	L1	ON	19.1
2.319000	---	24.21	46.00	21.79	1000.0	9.000	L1	ON	19.0
2.431500	27.55	---	56.00	28.45	1000.0	9.000	L1	ON	19.0
5.059500	25.25	---	60.00	34.75	1000.0	9.000	L1	ON	19.1
5.068500	---	20.42	50.00	29.58	1000.0	9.000	L1	ON	19.1
14.961750	---	24.02	50.00	25.98	1000.0	9.000	L1	ON	19.5
15.033750	29.69	---	60.00	30.31	1000.0	9.000	L1	ON	19.5

N Line

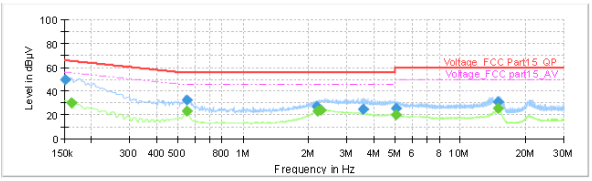


Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.150000	51.10	---	66.00	14.90	1000.0	9.000	N	ON	19.1
0.159000	---	31.93	55.52	23.59	1000.0	9.000	N	ON	19.1
0.548250	---	22.13	46.00	23.87	1000.0	9.000	N	ON	19.3
0.548250	31.73	---	56.00	24.27	1000.0	9.000	N	ON	19.3
2.143500	28.13	---	56.00	27.87	1000.0	9.000	N	ON	19.1
2.208750	---	24.55	46.00	21.45	1000.0	9.000	N	ON	19.1
2.276250	---	24.87	46.00	21.13	1000.0	9.000	N	ON	19.1
3.000750	22.71	---	56.00	33.29	1000.0	9.000	N	ON	19.1
4.650000	---	15.47	46.00	30.53	1000.0	9.000	N	ON	19.1
4.706250	18.33	---	56.00	37.67	1000.0	9.000	N	ON	19.1
15.029250	---	29.50	50.00	20.50	1000.0	9.000	N	ON	19.5
15.108000	34.01	---	60.00	25.99	1000.0	9.000	N	ON	19.5

802.11g, Channel No.: 1

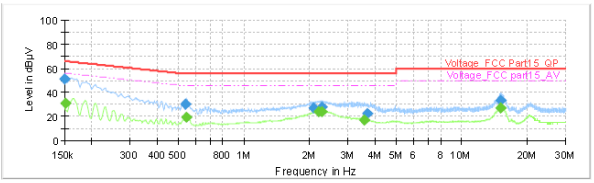
L Line



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.152250	49.36	---	65.88	16.52	1000.0	9.000	L1	ON	19.0
0.161250	---	30.48	55.40	24.92	1000.0	9.000	L1	ON	19.1
0.550500	---	23.49	46.00	22.51	1000.0	9.000	L1	ON	19.3
0.550500	32.92	---	56.00	23.08	1000.0	9.000	L1	ON	19.3
2.188500	27.05	---	56.00	28.95	1000.0	9.000	L1	ON	19.1
2.195250	---	23.06	46.00	22.94	1000.0	9.000	L1	ON	19.1
2.287500	---	24.19	46.00	21.81	1000.0	9.000	L1	ON	19.0
3.581250	24.87	---	56.00	31.13	1000.0	9.000	L1	ON	19.1
5.057250	25.42	---	60.00	34.58	1000.0	9.000	L1	ON	19.1
5.070750	---	20.29	50.00	29.71	1000.0	9.000	L1	ON	19.1
14.950500	---	25.84	50.00	24.16	1000.0	9.000	L1	ON	19.5
14.988750	30.85	---	60.00	29.15	1000.0	9.000	L1	ON	19.5

N Line

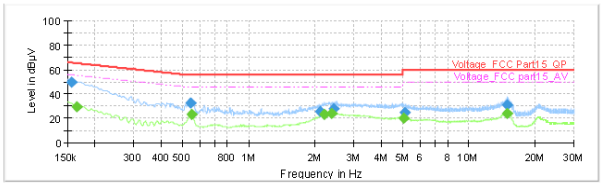


Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.150000	50.89	---	66.00	15.11	1000.0	9.000	N	ON	19.1
0.152250	---	31.18	55.88	24.70	1000.0	9.000	N	ON	19.1
0.539250	30.31	---	56.00	25.69	1000.0	9.000	N	ON	19.2
0.546000	---	19.61	46.00	26.39	1000.0	9.000	N	ON	19.2
2.080500	27.09	---	56.00	28.91	1000.0	9.000	N	ON	19.1
2.199750	---	24.13	46.00	21.87	1000.0	9.000	N	ON	19.1
2.271750	---	24.16	46.00	21.84	1000.0	9.000	N	ON	19.1
2.276250	28.12	---	56.00	27.88	1000.0	9.000	N	ON	19.1
3.552000	---	17.13	46.00	28.87	1000.0	9.000	N	ON	19.1
3.684750	22.58	---	56.00	33.42	1000.0	9.000	N	ON	19.1
15.045000	33.14	---	60.00	26.86	1000.0	9.000	N	ON	19.5
15.067500	---	27.30	50.00	22.70	1000.0	9.000	N	ON	19.5

802.11g, Channel No.: 6

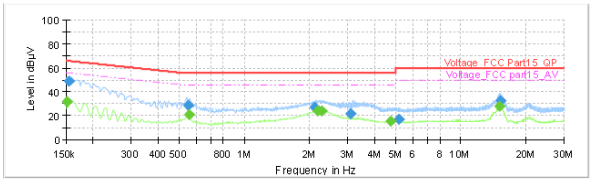
L Line



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.156750	49.34	---	65.63	16.29	1000.0	9.000	L1	ON	19.1
0.165750	---	29.24	55.17	25.93	1000.0	9.000	L1	ON	19.1
0.543750	32.67	---	56.00	23.33	1000.0	9.000	L1	ON	19.2
0.550500	---	23.61	46.00	22.39	1000.0	9.000	L1	ON	19.3
2.121000	25.76	---	56.00	30.24	1000.0	9.000	L1	ON	19.1
2.199750	---	23.19	46.00	22.81	1000.0	9.000	L1	ON	19.1
2.368500	---	24.18	46.00	21.82	1000.0	9.000	L1	ON	19.0
2.436000	27.70	---	56.00	28.30	1000.0	9.000	L1	ON	19.0
5.061750	---	20.34	50.00	29.66	1000.0	9.000	L1	ON	19.1
5.109000	25.10	---	60.00	34.90	1000.0	9.000	L1	ON	19.1
14.919000	---	24.05	50.00	25.95	1000.0	9.000	L1	ON	19.5
14.970750	31.25	---	60.00	28.75	1000.0	9.000	L1	ON	19.5

N Line

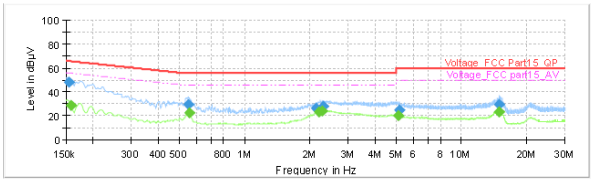


Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.152250	---	31.76	55.88	24.11	1000.0	9.000	N	ON	19.1
0.154500	49.02	---	65.75	16.73	1000.0	9.000	N	ON	19.1
0.550500	28.89	---	56.00	27.11	1000.0	9.000	N	ON	19.3
0.555000	---	20.65	46.00	25.35	1000.0	9.000	N	ON	19.3
2.118750	27.42	---	56.00	28.58	1000.0	9.000	N	ON	19.1
2.190750	---	24.29	46.00	21.71	1000.0	9.000	N	ON	19.1
2.271750	---	24.40	46.00	21.60	1000.0	9.000	N	ON	19.1
3.097500	21.74	---	56.00	34.26	1000.0	9.000	N	ON	19.1
4.715250	---	15.16	46.00	30.84	1000.0	9.000	N	ON	19.1
5.145000	16.88	---	60.00	43.12	1000.0	9.000	N	ON	19.1
14.995500	---	27.64	50.00	22.36	1000.0	9.000	N	ON	19.5
15.177750	32.22	---	60.00	27.78	1000.0	9.000	N	ON	19.4

802.11g, Channel No.: 11

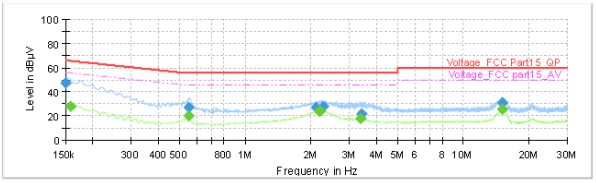
L Line



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.154500	47.86	---	65.75	17.89	1000.0	9.000	L1	ON	19.1
0.159000	---	28.76	55.52	26.76	1000.0	9.000	L1	ON	19.1
0.548250	29.66	---	56.00	26.34	1000.0	9.000	L1	ON	19.3
0.555000	---	22.50	46.00	23.50	1000.0	9.000	L1	ON	19.3
2.139000	26.17	---	56.00	29.83	1000.0	9.000	L1	ON	19.1
2.206500	---	23.23	46.00	22.77	1000.0	9.000	L1	ON	19.1
2.278500	---	24.07	46.00	21.93	1000.0	9.000	L1	ON	19.1
2.310000	27.99	---	56.00	28.01	1000.0	9.000	L1	ON	19.0
5.088750	---	20.20	50.00	29.80	1000.0	9.000	L1	ON	19.1
5.140500	24.84	---	60.00	35.16	1000.0	9.000	L1	ON	19.1
14.941500	29.35	---	60.00	30.65	1000.0	9.000	L1	ON	19.5
14.968500	---	23.64	50.00	26.36	1000.0	9.000	L1	ON	19.5

N Line

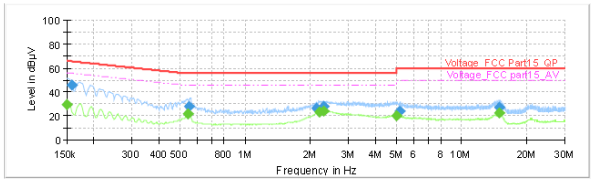


Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.150000	47.30	---	66.00	18.70	1000.0	9.000	N	ON	19.1
0.159000	---	27.77	55.52	27.75	1000.0	9.000	N	ON	19.1
0.550500	---	19.82	46.00	26.18	1000.0	9.000	N	ON	19.3
0.550500	27.20	---	56.00	28.80	1000.0	9.000	N	ON	19.3
2.105250	26.79	---	56.00	29.21	1000.0	9.000	N	ON	19.1
2.186250	---	23.66	46.00	22.34	1000.0	9.000	N	ON	19.1
2.208750	---	23.77	46.00	22.23	1000.0	9.000	N	ON	19.1
2.271750	27.78	---	56.00	28.22	1000.0	9.000	N	ON	19.1
3.367500	---	17.75	46.00	28.25	1000.0	9.000	N	ON	19.1
3.405750	21.75	---	56.00	34.25	1000.0	9.000	N	ON	19.1
14.997750	---	25.80	50.00	24.20	1000.0	9.000	N	ON	19.5
15.101250	30.71	---	60.00	29.29	1000.0	9.000	N	ON	19.5

802.11n(HT20), Channel No.: 1

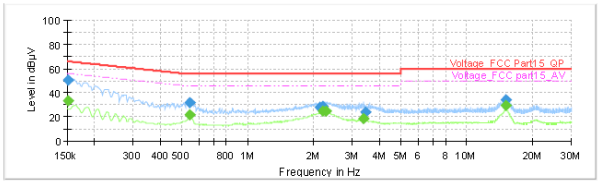
L Line



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.150000	---	29.44	56.00	26.56	1000.0	9.000	L1	ON	19.1
0.159000	46.03	---	65.52	19.48	1000.0	9.000	L1	ON	19.1
0.546000	---	21.74	46.00	24.26	1000.0	9.000	L1	ON	19.2
0.552750	27.96	---	56.00	28.04	1000.0	9.000	L1	ON	19.3
2.141250	26.25	---	56.00	29.75	1000.0	9.000	L1	ON	19.1
2.199750	---	23.12	46.00	22.88	1000.0	9.000	L1	ON	19.1
2.292000	27.92	---	56.00	28.08	1000.0	9.000	L1	ON	19.0
2.292000	---	23.96	46.00	22.04	1000.0	9.000	L1	ON	19.0
5.016750	---	20.32	50.00	29.68	1000.0	9.000	L1	ON	19.1
5.190000	24.05	---	60.00	35.95	1000.0	9.000	L1	ON	19.1
14.928000	27.30	---	60.00	32.70	1000.0	9.000	L1	ON	19.5
14.975250	---	22.34	50.00	27.66	1000.0	9.000	L1	ON	19.5

N Line

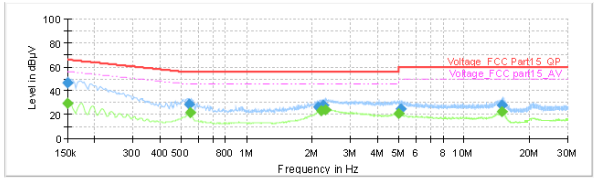


Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.152250	---	33.61	55.88	22.27	1000.0	9.000	N	ON	19.1
0.152250	50.48	---	65.88	15.39	1000.0	9.000	N	ON	19.1
0.546000	---	22.05	46.00	23.95	1000.0	9.000	N	ON	19.2
0.546000	31.67	---	56.00	24.33	1000.0	9.000	N	ON	19.2
2.123250	28.00	---	56.00	28.00	1000.0	9.000	N	ON	19.1
2.206500	28.58	---	56.00	27.42	1000.0	9.000	N	ON	19.1
2.211000	---	24.64	46.00	21.36	1000.0	9.000	N	ON	19.1
2.278500	---	24.84	46.00	21.16	1000.0	9.000	N	ON	19.1
3.365250	---	18.56	46.00	27.44	1000.0	9.000	N	ON	19.1
3.439500	23.91	---	56.00	32.09	1000.0	9.000	N	ON	19.0
15.038250	---	29.54	50.00	20.46	1000.0	9.000	N	ON	19.5
15.123750	34.24	---	60.00	25.76	1000.0	9.000	N	ON	19.5

802.11n(HT20), Channel No.: 6

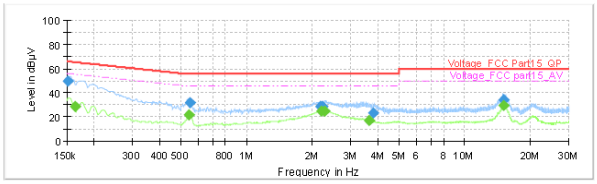
L Line



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.150000	---	29.35	56.00	26.65	1000.0	9.000	L1	ON	19.1
0.150000	46.38	---	66.00	19.62	1000.0	9.000	L1	ON	19.1
0.541500	28.77	---	56.00	27.23	1000.0	9.000	L1	ON	19.2
0.552750	---	21.82	46.00	24.18	1000.0	9.000	L1	ON	19.3
2.139000	26.18	---	56.00	29.82	1000.0	9.000	L1	ON	19.1
2.193000	---	23.17	46.00	22.83	1000.0	9.000	L1	ON	19.1
2.260500	27.71	---	56.00	28.29	1000.0	9.000	L1	ON	19.1
2.312250	---	24.07	46.00	21.93	1000.0	9.000	L1	ON	19.0
5.003250	---	20.64	50.00	29.36	1000.0	9.000	L1	ON	19.1
5.086500	24.91	---	60.00	35.09	1000.0	9.000	L1	ON	19.1
14.961750	---	22.28	50.00	27.72	1000.0	9.000	L1	ON	19.5
14.964000	27.56	---	60.00	32.44	1000.0	9.000	L1	ON	19.5

N Line

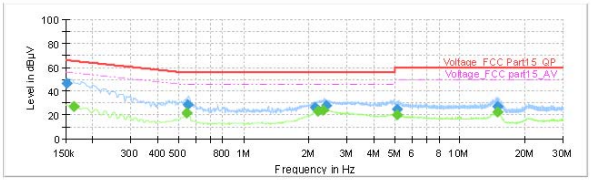


Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.152250	49.80	---	65.88	16.08	1000.0	9.000	N	ON	19.1
0.163500	---	28.78	55.28	26.50	1000.0	9.000	N	ON	19.1
0.546000	---	21.98	46.00	24.02	1000.0	9.000	N	ON	19.2
0.548250	31.75	---	56.00	24.25	1000.0	9.000	N	ON	19.3
2.190750	28.38	---	56.00	27.62	1000.0	9.000	N	ON	19.1
2.204250	---	24.57	46.00	21.43	1000.0	9.000	N	ON	19.1
2.222250	28.78	---	56.00	27.22	1000.0	9.000	N	ON	19.1
2.283000	---	24.84	46.00	21.16	1000.0	9.000	N	ON	19.1
3.644250	---	17.07	46.00	28.93	1000.0	9.000	N	ON	19.1
3.797250	23.18	---	56.00	32.82	1000.0	9.000	N	ON	19.0
15.027000	---	29.41	50.00	20.59	1000.0	9.000	N	ON	19.5
15.049500	34.11	---	60.00	25.89	1000.0	9.000	N	ON	19.5

802.11n(HT20), Channel No.: 11

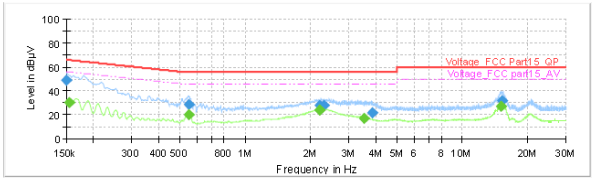
L Line



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.152250	46.20	---	65.88	19.68	1000.0	9.000	L1	ON	19.0
0.163500	---	27.16	55.28	28.12	1000.0	9.000	L1	ON	19.1
0.541500	---	21.55	46.00	24.45	1000.0	9.000	L1	ON	19.2
0.552750	28.76	---	56.00	27.24	1000.0	9.000	L1	ON	19.3
2.125500	26.00	---	56.00	30.00	1000.0	9.000	L1	ON	19.1
2.193000	---	23.14	46.00	22.86	1000.0	9.000	L1	ON	19.1
2.334750	---	24.10	46.00	21.90	1000.0	9.000	L1	ON	19.0
2.400000	27.64	---	56.00	28.36	1000.0	9.000	L1	ON	19.0
5.111250	---	20.09	50.00	29.91	1000.0	9.000	L1	ON	19.1
5.131500	24.66	---	60.00	35.34	1000.0	9.000	L1	ON	19.1
14.982000	27.30	---	60.00	32.70	1000.0	9.000	L1	ON	19.5
14.986500	---	22.34	50.00	27.66	1000.0	9.000	L1	ON	19.5

N Line

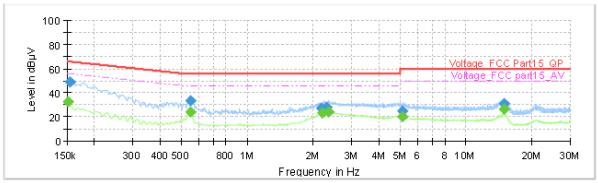


Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.150000	48.99	---	66.00	17.01	1000.0	9.000	N	ON	19.1
0.154500	---	30.60	55.75	25.16	1000.0	9.000	N	ON	19.1
0.550500	---	20.22	46.00	25.78	1000.0	9.000	N	ON	19.3
0.552750	28.87	---	56.00	27.13	1000.0	9.000	N	ON	19.3
2.195250	28.13	---	56.00	27.87	1000.0	9.000	N	ON	19.1
2.206500	---	24.27	46.00	21.73	1000.0	9.000	N	ON	19.1
2.211000	---	24.34	46.00	21.66	1000.0	9.000	N	ON	19.1
2.298750	27.99	---	56.00	28.01	1000.0	9.000	N	ON	19.0
3.536250	---	16.97	46.00	29.03	1000.0	9.000	N	ON	19.1
3.835500	22.05	---	56.00	33.95	1000.0	9.000	N	ON	19.0
15.058500	---	27.35	50.00	22.65	1000.0	9.000	N	ON	19.5
15.288000	31.53	---	60.00	28.47	1000.0	9.000	N	ON	19.4

802.11n(HT40), Channel No.: 3

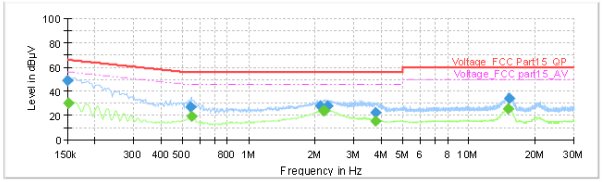
L Line



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.152250	---	32.79	55.88	23.09	1000.0	9.000	L1	ON	19.0
0.154500	49.09	---	65.75	16.66	1000.0	9.000	L1	ON	19.1
0.548250	---	23.89	46.00	22.11	1000.0	9.000	L1	ON	19.3
0.548250	33.15	---	56.00	22.85	1000.0	9.000	L1	ON	19.3
2.186250	26.89	---	56.00	29.11	1000.0	9.000	L1	ON	19.1
2.195250	---	23.06	46.00	22.94	1000.0	9.000	L1	ON	19.1
2.312250	28.15	---	56.00	27.85	1000.0	9.000	L1	ON	19.0
2.346000	---	24.21	46.00	21.79	1000.0	9.000	L1	ON	19.0
5.120250	24.98	---	60.00	35.02	1000.0	9.000	L1	ON	19.1
5.136000	---	19.81	50.00	30.19	1000.0	9.000	L1	ON	19.1
14.952750	---	26.18	50.00	23.82	1000.0	9.000	L1	ON	19.5
14.973000	31.36	---	60.00	28.64	1000.0	9.000	L1	ON	19.5

N Line

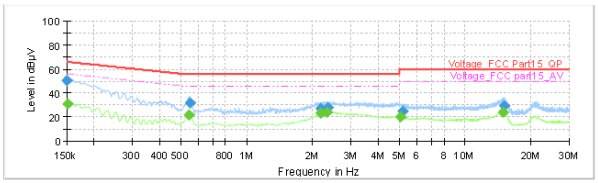


Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.150000	48.81	---	66.00	17.19	1000.0	9.000	N	ON	19.1
0.152250	---	30.26	55.88	25.62	1000.0	9.000	N	ON	19.1
0.546000	27.46	---	56.00	28.54	1000.0	9.000	N	ON	19.2
0.552750	---	19.67	46.00	26.33	1000.0	9.000	N	ON	19.3
2.121000	27.52	---	56.00	28.48	1000.0	9.000	N	ON	19.1
2.188500	---	23.85	46.00	22.15	1000.0	9.000	N	ON	19.1
2.208750	---	23.80	46.00	22.20	1000.0	9.000	N	ON	19.1
2.285250	28.03	---	56.00	27.97	1000.0	9.000	N	ON	19.0
3.779250	---	15.57	46.00	30.43	1000.0	9.000	N	ON	19.1
3.783750	22.18	---	56.00	33.82	1000.0	9.000	N	ON	19.1
15.074250	---	25.90	50.00	24.10	1000.0	9.000	N	ON	19.5
15.294750	33.89	---	60.00	26.11	1000.0	9.000	N	ON	19.4

802.11n(HT40), Channel No.: 6

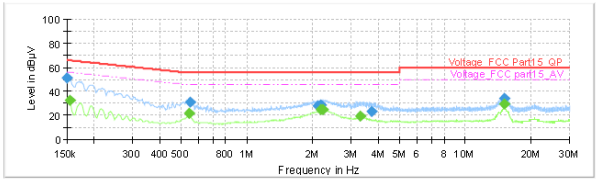
L Line



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.150000	50.19	---	66.00	15.81	1000.0	9.000	L1	ON	19.1
0.152250	---	31.04	55.88	24.83	1000.0	9.000	L1	ON	19.0
0.546000	---	22.09	46.00	23.91	1000.0	9.000	L1	ON	19.2
0.552750	32.06	---	56.00	23.94	1000.0	9.000	L1	ON	19.3
2.186250	26.80	---	56.00	29.20	1000.0	9.000	L1	ON	19.1
2.188500	---	23.08	46.00	22.92	1000.0	9.000	L1	ON	19.1
2.337000	---	24.22	46.00	21.78	1000.0	9.000	L1	ON	19.0
2.361750	27.95	---	56.00	28.05	1000.0	9.000	L1	ON	19.0
5.077500	---	20.25	50.00	29.75	1000.0	9.000	L1	ON	19.1
5.151750	24.67	---	60.00	35.33	1000.0	9.000	L1	ON	19.1
14.939250	---	24.05	50.00	25.95	1000.0	9.000	L1	ON	19.5
15.006750	29.48	---	60.00	30.52	1000.0	9.000	L1	ON	19.5

N Line

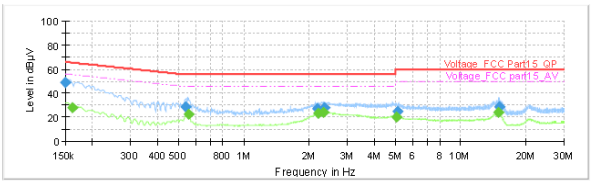


Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.150000	50.91	---	66.00	15.09	1000.0	9.000	N	ON	19.1
0.154500	---	32.63	55.75	23.12	1000.0	9.000	N	ON	19.1
0.546000	---	21.76	46.00	24.24	1000.0	9.000	N	ON	19.2
0.552750	30.71	---	56.00	25.29	1000.0	9.000	N	ON	19.3
2.114250	27.96	---	56.00	28.04	1000.0	9.000	N	ON	19.1
2.168250	28.34	---	56.00	27.66	1000.0	9.000	N	ON	19.1
2.181750	---	24.42	46.00	21.58	1000.0	9.000	N	ON	19.1
2.238000	---	24.75	46.00	21.25	1000.0	9.000	N	ON	19.1
3.304500	---	19.18	46.00	26.82	1000.0	9.000	N	ON	19.1
3.732000	23.18	---	56.00	32.82	1000.0	9.000	N	ON	19.1
15.049500	---	29.72	50.00	20.28	1000.0	9.000	N	ON	19.5
15.049500	34.16	---	60.00	25.84	1000.0	9.000	N	ON	19.5

802.11n(HT40), Channel No.: 9

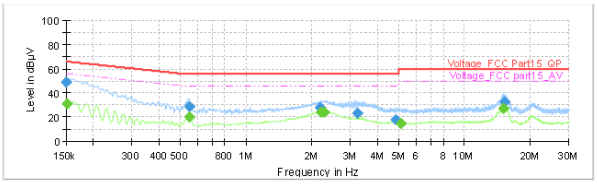
L Line



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.150000	48.71	---	66.00	17.29	1000.0	9.000	L1	ON	19.1
0.161250	---	28.24	55.40	27.16	1000.0	9.000	L1	ON	19.1
0.539250	28.73	---	56.00	27.27	1000.0	9.000	L1	ON	19.2
0.555000	---	22.19	46.00	23.81	1000.0	9.000	L1	ON	19.3
2.181750	26.85	---	56.00	29.15	1000.0	9.000	L1	ON	19.1
2.193000	---	23.12	46.00	22.88	1000.0	9.000	L1	ON	19.1
2.332500	---	24.23	46.00	21.77	1000.0	9.000	L1	ON	19.0
2.348250	27.97	---	56.00	28.03	1000.0	9.000	L1	ON	19.0
5.066250	---	20.41	50.00	29.59	1000.0	9.000	L1	ON	19.1
5.102250	25.02	---	60.00	34.98	1000.0	9.000	L1	ON	19.1
14.946000	---	23.74	50.00	26.26	1000.0	9.000	L1	ON	19.5
15.101250	28.73	---	60.00	31.27	1000.0	9.000	L1	ON	19.5

N Line

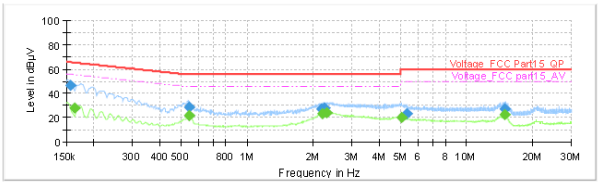


Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.150000	48.83	---	66.00	17.17	1000.0	9.000	N	ON	19.1
0.152250	---	30.64	55.88	25.24	1000.0	9.000	N	ON	19.1
0.548250	---	19.95	46.00	26.05	1000.0	9.000	N	ON	19.3
0.550500	28.71	---	56.00	27.29	1000.0	9.000	N	ON	19.3
2.170500	28.04	---	56.00	27.96	1000.0	9.000	N	ON	19.1
2.204250	---	24.16	46.00	21.84	1000.0	9.000	N	ON	19.1
2.280750	---	24.18	46.00	21.82	1000.0	9.000	N	ON	19.1
3.239250	22.92	---	56.00	33.08	1000.0	9.000	N	ON	19.1
4.857000	17.62	---	56.00	38.38	1000.0	9.000	N	ON	19.1
5.084250	---	14.91	50.00	35.09	1000.0	9.000	N	ON	19.1
15.049500	---	27.41	50.00	22.59	1000.0	9.000	N	ON	19.5
15.159750	32.31	---	60.00	27.69	1000.0	9.000	N	ON	19.5

BLE, Channel No.: 0

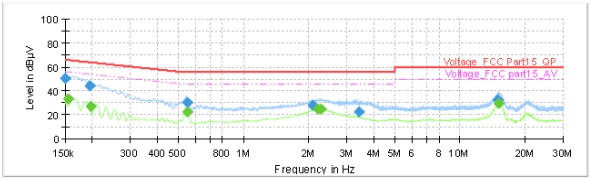
L Line



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.156750	46.86	---	65.63	18.78	1000.0	9.000	L1	ON	19.1
0.163500	---	27.55	55.28	27.73	1000.0	9.000	L1	ON	19.1
0.541500	28.77	---	56.00	27.23	1000.0	9.000	L1	ON	19.2
0.546000	---	21.65	46.00	24.35	1000.0	9.000	L1	ON	19.2
2.177250	26.78	---	56.00	29.22	1000.0	9.000	L1	ON	19.1
2.204250	---	23.20	46.00	22.80	1000.0	9.000	L1	ON	19.1
2.242500	27.67	---	56.00	28.33	1000.0	9.000	L1	ON	19.1
2.312250	---	24.01	46.00	22.00	1000.0	9.000	L1	ON	19.0
5.041500	---	20.50	50.00	29.50	1000.0	9.000	L1	ON	19.1
5.336250	23.00	---	60.00	37.00	1000.0	9.000	L1	ON	19.1
14.966250	---	22.16	50.00	27.84	1000.0	9.000	L1	ON	19.5
14.975250	27.41	---	60.00	32.59	1000.0	9.000	L1	ON	19.5

N Line

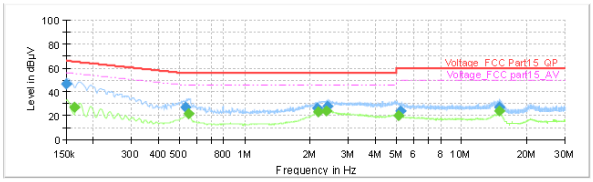


Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.150000	50.38	---	66.00	15.62	1000.0	9.000	N	ON	19.1
0.154500	---	33.02	55.75	22.73	1000.0	9.000	N	ON	19.1
0.195000	43.91	---	63.82	19.91	1000.0	9.000	N	ON	19.2
0.197250	---	26.96	53.73	26.77	1000.0	9.000	N	ON	19.2
0.548250	---	22.21	46.00	23.79	1000.0	9.000	N	ON	19.3
0.550500	29.95	---	56.00	26.05	1000.0	9.000	N	ON	19.3
2.082750	27.67	---	56.00	28.33	1000.0	9.000	N	ON	19.1
2.208750	---	24.63	46.00	21.37	1000.0	9.000	N	ON	19.1
2.287500	---	24.81	46.00	21.19	1000.0	9.000	N	ON	19.0
3.412500	22.71	---	56.00	33.29	1000.0	9.000	N	ON	19.1
14.977500	32.24	---	60.00	27.76	1000.0	9.000	N	ON	19.5
15.065250	---	29.24	50.00	20.76	1000.0	9.000	N	ON	19.5

BLE, Channel No.: 19

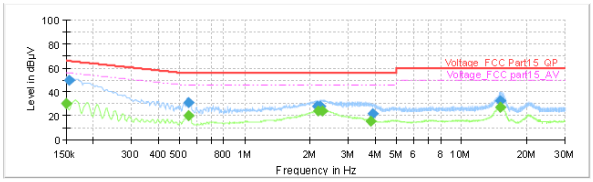
L Line



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.150000	46.61	---	66.00	19.39	1000.0	9.000	L1	ON	19.1
0.163500	---	26.87	55.28	28.41	1000.0	9.000	L1	ON	19.1
0.532500	27.46	---	56.00	28.54	1000.0	9.000	L1	ON	19.2
0.552750	---	21.75	46.00	24.25	1000.0	9.000	L1	ON	19.3
2.145750	26.29	---	56.00	29.71	1000.0	9.000	L1	ON	19.1
2.190750	---	23.09	46.00	22.91	1000.0	9.000	L1	ON	19.1
2.366250	---	23.83	46.00	22.17	1000.0	9.000	L1	ON	19.0
2.393250	27.56	---	56.00	28.44	1000.0	9.000	L1	ON	19.0
5.084250	---	20.26	50.00	29.74	1000.0	9.000	L1	ON	19.1
5.217000	23.83	---	60.00	36.17	1000.0	9.000	L1	ON	19.1
14.907750	27.29	---	60.00	32.71	1000.0	9.000	L1	ON	19.5
14.921250	---	24.15	50.00	25.85	1000.0	9.000	L1	ON	19.5

N Line

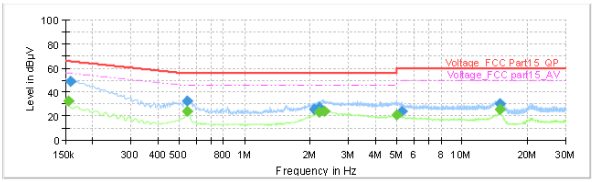


Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.150000	---	30.54	56.00	25.46	1000.0	9.000	N	ON	19.1
0.154500	49.66	---	65.75	16.09	1000.0	9.000	N	ON	19.1
0.548250	31.32	---	56.00	24.68	1000.0	9.000	N	ON	19.3
0.550500	---	20.24	46.00	25.76	1000.0	9.000	N	ON	19.3
2.161500	28.27	---	56.00	27.73	1000.0	9.000	N	ON	19.1
2.188500	---	24.22	46.00	21.79	1000.0	9.000	N	ON	19.1
2.220000	28.16	---	56.00	27.84	1000.0	9.000	N	ON	19.1
2.289750	---	24.14	46.00	21.86	1000.0	9.000	N	ON	19.0
3.797250	---	15.70	46.00	30.30	1000.0	9.000	N	ON	19.0
3.887250	21.39	---	56.00	34.61	1000.0	9.000	N	ON	19.0
15.033750	---	27.17	50.00	22.83	1000.0	9.000	N	ON	19.5
15.033750	32.27	---	60.00	27.73	1000.0	9.000	N	ON	19.5

BLE, Channel No.: 39

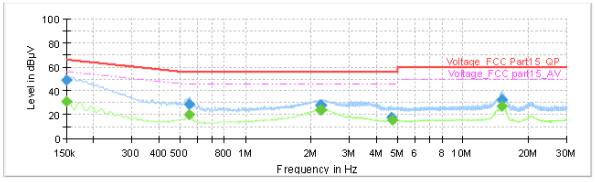
L Line



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.154500	---	32.91	55.75	22.85	1000.0	9.000	L1	ON	19.1
0.159000	48.95	---	65.52	16.56	1000.0	9.000	L1	ON	19.1
0.543750	32.54	---	56.00	23.46	1000.0	9.000	L1	ON	19.2
0.546000	---	23.85	46.00	22.15	1000.0	9.000	L1	ON	19.2
2.082750	25.35	---	56.00	30.65	1000.0	9.000	L1	ON	19.1
2.199750	---	23.20	46.00	22.80	1000.0	9.000	L1	ON	19.1
2.206500	27.23	---	56.00	28.77	1000.0	9.000	L1	ON	19.1
2.323500	---	24.21	46.00	21.79	1000.0	9.000	L1	ON	19.0
4.976250	---	20.58	46.00	25.42	1000.0	9.000	L1	ON	19.1
5.257500	23.99	---	60.00	36.01	1000.0	9.000	L1	ON	19.1
14.851500	30.59	---	60.00	29.41	1000.0	9.000	L1	ON	19.5
14.957250	---	25.87	50.00	24.13	1000.0	9.000	L1	ON	19.5

N Line



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.150000	---	31.16	56.00	24.84	1000.0	9.000	N	ON	19.1
0.150000	48.50	---	66.00	17.50	1000.0	9.000	N	ON	19.1
0.550500	---	20.15	46.00	25.85	1000.0	9.000	N	ON	19.3
0.550500	28.79	---	56.00	27.21	1000.0	9.000	N	ON	19.3
2.204250	28.09	---	56.00	27.91	1000.0	9.000	N	ON	19.1
2.206500	---	24.19	46.00	21.81	1000.0	9.000	N	ON	19.1
2.231250	28.13	---	56.00	27.87	1000.0	9.000	N	ON	19.1
2.233500	---	24.27	46.00	21.73	1000.0	9.000	N	ON	19.1
4.670250	17.47	---	56.00	38.53	1000.0	9.000	N	ON	19.1
4.735500	---	15.13	46.00	30.87	1000.0	9.000	N	ON	19.1
15.015750	---	27.05	50.00	22.95	1000.0	9.000	N	ON	19.5
15.083250	32.42	---	60.00	27.58	1000.0	9.000	N	ON	19.5

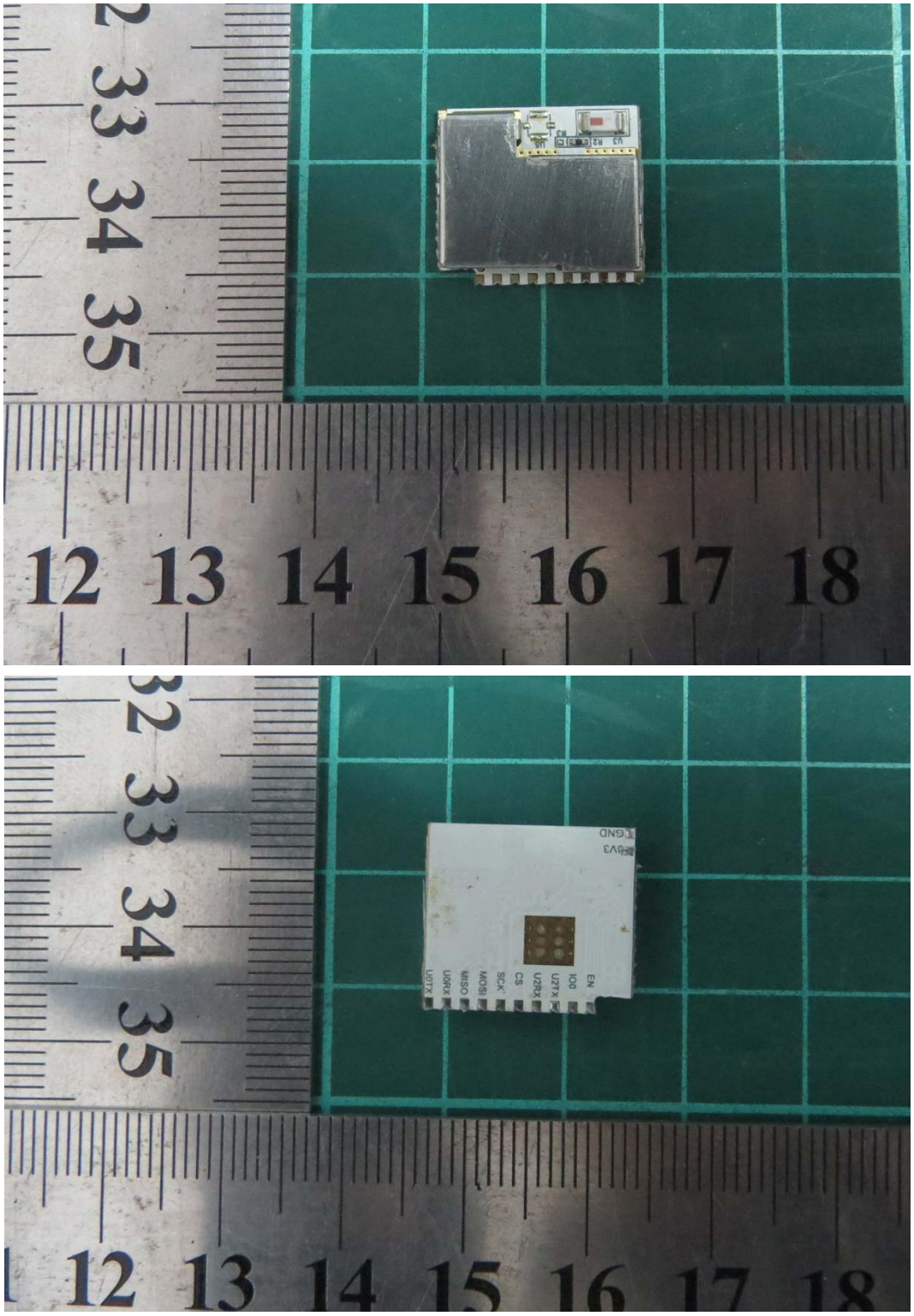
6. Main Test Instruments

Name	Type	Manufacturer	Serial Number	Calibration Date	Expiration Time
Spectrum Analyzer	FSV30	R&S	100815	2016-12-16	2017-12-15
EMI Test Receiver	ESCI	R&S	100948	2016-06-01	2017-05-31
TRILOG Broadband Antenna	VULB 9163	Schwarzbeck	9163-201	2014-12-06	2017-12-05
Double Ridged Waveguide Horn Antenna	HF907	R&S	100126	2014-12-06	2017-12-05
Loop Antenna	FMZB1519	SCHWARZBECK	1519-047	2017-02-18	2020-02-17
Standard Gain Horn	3160-09	ETS-Lindgren	00102644	2015-01-30	2018-01-29
EMI Test Receiver	ESCS30	R&S	100138	2016-06-01	2017-05-31
LISN	ENV216	R&S	101171	2016-12-17	2019-12-16
Spectrum Analyzer	N9010A	Agilent	MY47191109	2016-05-21	2017-05-20
RF Cable	SMA 15cm	Agilent	0001	2017-02-06	2017-08-05

*******END OF REPORT *******

ANNEX A: EUT Appearance and Test Setup

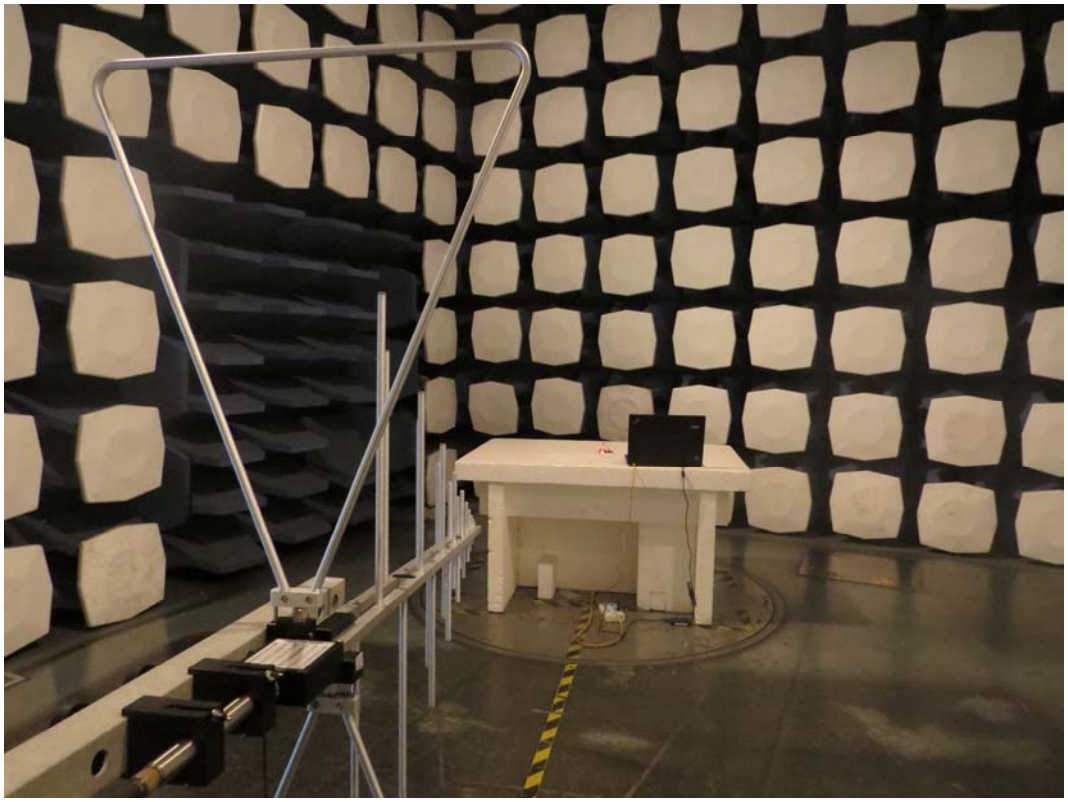
A.1 EUT Appearance



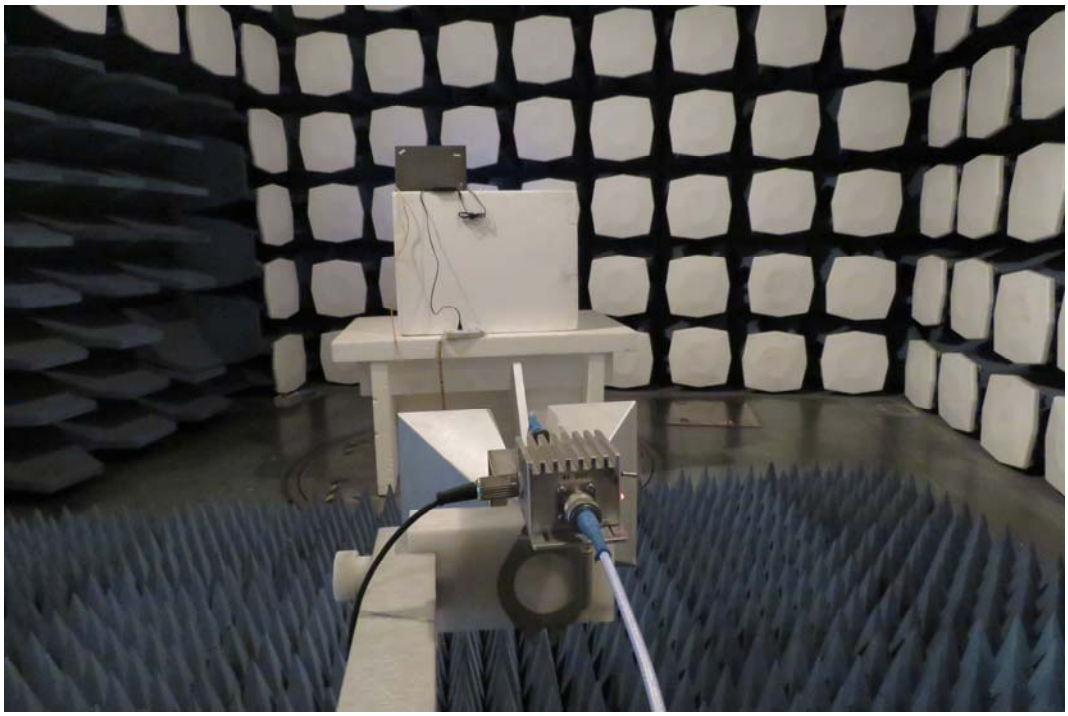
a: EUT

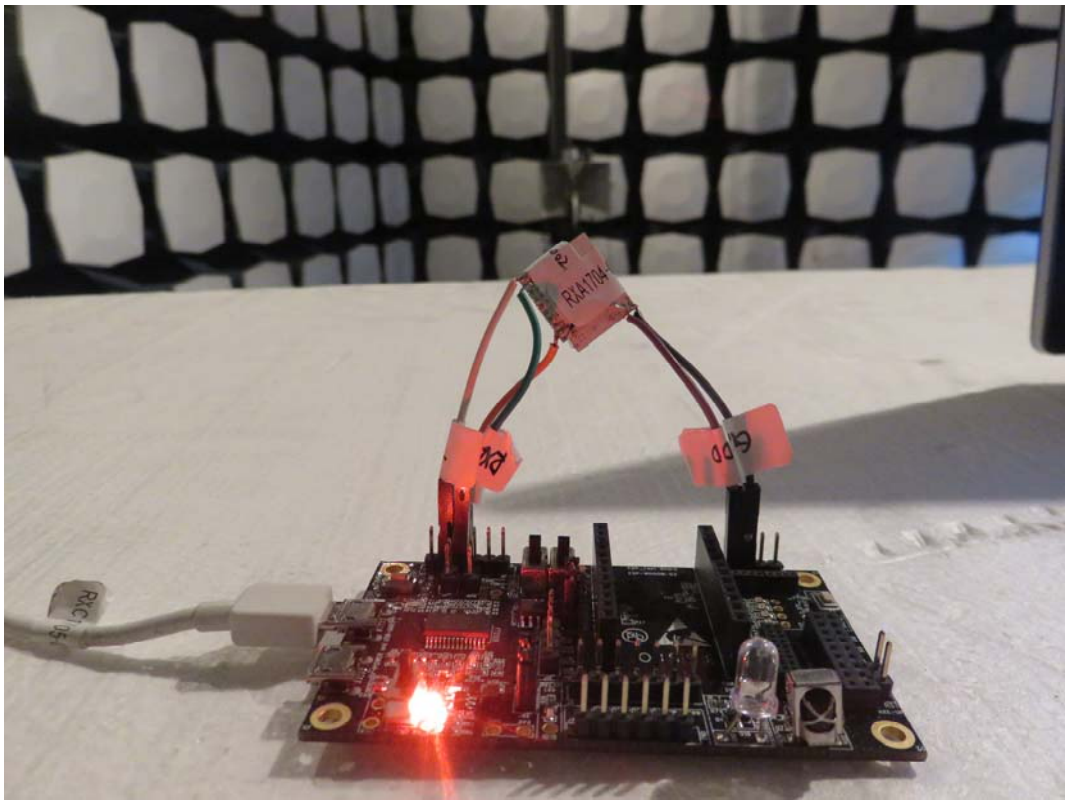
Picture 1 EUT and Accessory

A.2 Test Setup



30MHz-1GHz





Above 1GHz

Picture 2 Radiated Emission Test Setup

Picture 3 Conducted Emission Test Setup